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Statistical Studies of Heart Disease, VII

Salmonella duval



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Public Health Reports

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Statistical Studies of Heart Disease

VII. Mortality from Eight Specific Forms of Heart Disease Among White Persons

By MARY GOVER, D. Sc. Hyg., and MARYLAND Y. PENNELL, M. Sc. Hyg.*

The 1938 revision of the International List of Causes of Death (1) showed a total of 20 heart disease rubrics, an increase of 7 over the 1929 revision. Each subdivision of heart disease based on the tissue affected was subdivided on the basis of the rheumatic origin of the specific form of heart disease, in order to establish subordinate classification groups of deaths certified as due to the after effects of rheumatic fever. The deaths thus tabulated in the "other chronic rheumatic heart disease" group represent about 2 percent of the total number of heart disease deaths (exclusive of a few tabulated as chronic rheumatic endocarditis and included under chronic valvular disease in table 1). These deaths added to the 11 percent tabulated as due to chronic affections of the valves and endocardium approximate a classification group of all reported chronic rheumatic heart disease, but some deaths of nonrheumatic origin are included.

In addition to this change in 1938, four terms were reallocated from "other diseases of the heart" to "chronic myocarditis," namely, cardiovascular disease, hypertensive heart disease, abscess of heart, and rupture of heart. The transfer involved 54,584 deaths in 1940 (2), or nearly half of the deaths formerly tabulated as due to other diseases of the heart and one-quarter of the deaths tabulated in 1940 as due to diseases of the myocardium. The chronic myocarditis group also was increased by 10,812 deaths reallocated from "other diseases of the myocardium" as tabulated under the 1929 revision.

A further classification change in 1938 transferred certain heart

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disease rubrics to various other causes of death resulting in a loss of 11,519 deaths formerly classified as due to heart disease (2). A large proportion of these deaths (9,166) had been certified as due to cardiac nephritis, cardionephritis, or cardiorenal disease, and were transferred from "other diseases of the heart" to "chronic nephritis."

Details of the several reclassifications are presented in a special report of the National Office of Vital Statistics (2). Table 1 as shown here is adapted from that report and gives the numbers of deaths in 1940 tabulated by both the 1929 and 1938 revisions of the International List. The classification group, diseases of the heart (all forms), was reduced only 3 percent through transfers of deaths to other main groups. Changes within the main classification groups, however, were of major importance numerically and, as has been stated, affected principally other diseases of the heart and chronic myocarditis.

In the sixth revision of the International List in 1948, which provides a single list applicable to both morbidity and mortality statistics

Table 1. Deaths from heart disease in 1940 tabulated according to both the 1929 and 1938 revisions of the International List of Causes of Death¹

| International List titles, 1938 revision | List numbers, 1938 revision | Deaths in 1940 classified by | | Reallocations in deaths between 2 revisions | Percent of heart disease deaths, 1938 revision | |
|--|-----------------------------|------------------------------|---------------|---|--|---|
| | | 1929 revision | 1938 revision | | Based on all heart disease deaths | Based on five broad classification groups |
| Diseases of the heart (all forms) | 90-95 | 396,710 | 385,191 | -11,519 | 100.0 | ----- |
| Diseases of the coronary arteries and angina pectoris | 94a, b | 101,361 | 101,463 | + 102 | 26.4 | 100.0 |
| Acute endocarditis (except rheumatic) | 91a, b, c | 2,797 | 2,830 | + 33 | .7 | 100.0 |
| Chronic affections of the valves and endocardium and other chronic rheumatic heart disease | | 51,875 | 51,691 | - 184 | 13.4 | 100.0 |
| Valvular disease and chronic endocarditis | 92a, b, d | 36,888 | 39,572 | + 2,684 | 10.3 | 71.1 |
| Endocarditis (unspecified, 45 years and over) | 92c | 2,902 | 2,708 | - 194 | .7 | 5.6 |
| Other chronic rheumatic heart disease | 93a, 92c, 93c, 95b | 12,085 | 9,411 | - 2,674 | 2.4 | 23.3 |
| Diseases of the myocardium | | 146,994 | 199,996 | +53,002 | 51.0 | 100.0 |
| Acute myocarditis (except rheumatic) | 93a | 4,168 | 4,152 | - 16 | 1.1 | 2.8 |
| Myocarditis (unspecified, under 45 years) | 93b | 744 | 725 | - 19 | .2 | .5 |
| Chronic myocarditis | 93d | 110,704 | 176,812 | +66,108 | 45.9 | 75.3 |
| Other myocarditis | 93e | 31,378 | 18,307 | -13,071 | 4.7 | 21.4 |
| Other diseases of the heart | | 93,683 | 29,211 | -64,472 | 7.6 | 100.0 |
| Pericarditis (except rheumatic) | 90b | 588 | 580 | - 8 | .1 | 2.0 |
| Functional diseases of the heart | 95a | 959 | 1,021 | + 62 | .3 | 3.5 |
| Other diseases of the heart | 95c | 92,136 | 27,610 | -64,526 | 7.2 | 94.5 |
| Closely related diseases | | | | | | |
| Syphilitic heart disease | 30d, e | (²) | 5,160 | ----- | ----- | ----- |
| Acute rheumatic fever | 58 | 1,831 | 1,725 | ----- | ----- | ----- |
| Congenital heart disease | 157e, f | (²) | 6,354 | ----- | ----- | ----- |

¹ See Vital Statistics Special Reports 19: 153-277 (1944).

² Not available.

tics (3), a total of 19 individual categories are defined for diseases of the heart under the following four main divisions: chronic rheumatic heart disease, arteriosclerotic and degenerative heart disease, hypertensive heart disease, and other diseases of the heart. Preliminary tabulations of deaths during the first part of 1949 show a net gain between the fifth and sixth revisions of about 10 percent in the total number of deaths tabulated as diseases of the heart (4, 5). However, the shifts within the main divisions are not available at the present time, and it must be kept in mind that the terminology used in this study on specific forms of heart disease is based on the fifth (1938) revision.

The Eight Specific Forms

The five main divisions of diseases of the heart as suggested by the National Office of Vital Statistics are used in table 1 rather than the six divisions of the International List. Diseases of the myocardium accounted for half of the total deaths from all forms of heart disease in 1940. In that group three out of four deaths were certified as chronic myocarditis. Diseases of the coronary arteries and angina pectoris ranked second, with one-fourth of the deaths. In third place, with 13 percent of the heart disease deaths, were those tabulated as due to chronic affections of the valves and endocardium and other chronic rheumatic heart disease. In this category 71 percent of the deaths were certified as a form of valvular disease. Other diseases of the heart accounted for only 8 percent of the heart deaths; in this group 95 percent of the deaths were certified as a rare, ill-defined, or unspecified form of heart disease, the majority being unspecified as to form. The fifth main division, with less than 1 percent of the total deaths, was acute endocarditis.

Three other groups of deaths are considered in this study, namely, syphilitic heart disease, acute rheumatic fever, and congenital heart disease. Each category is related broadly to diseases of the heart but not tabulated in that main classification group. The last two are important causes of heart mortality among both sexes in the younger ages; the first, among middle-aged males.

Although coding procedures are uniform for the entire country, there are known to be geographic differences in the relative frequency of reported multiple causes of death. Physicians in urban areas, such as predominate in the North, tend to report more multiple causes. Hence relatively more urban death certificates are referred to the Joint-Cause Manual in a selection of the primary (tabulated) cause of death. In rural areas one may expect a greater inaccuracy of reporting the primary cause of death, as well as the details of diagnosis. This would lead to an increase in recorded mortality from the subgroup, other diseases of the heart, as the size of the city decreases.

Male-Female Comparison

Seven of the eight specific forms of heart disease showed a higher mortality for men than for women. The age-adjusted death rates per 100,000 population for each category were as follows for white males and females in the United States in 1940.

| | Male | Female | Percent excess male over female |
|---|--------|--------|---------------------------------|
| Diseases of the myocardium----- | 162.91 | 135.00 | 21 |
| Diseases of the coronary arteries----- | 111.93 | 46.54 | 141 |
| Chronic affections of the valves and endocardium----- | 39.50 | 34.84 | 13 |
| Other diseases of the heart----- | 25.01 | 15.71 | 59 |
| Congenital heart disease----- | 5.84 | 4.45 | 31 |
| Syphilitic heart disease----- | 4.29 | 1.08 | 297 |
| Acute endocarditis----- | 1.98 | 1.69 | 17 |
| Acute rheumatic fever----- | 1.15 | 1.19 | -3 |

Mortality from syphilitic heart disease showed the greatest sex differential, as would be expected, with a rate for males nearly four times that for females. Death rates from diseases of the coronary arteries among males exceeded those among females by 141 percent. For other forms of heart disease the excess of male over female mortality was 59 percent or less. Acute rheumatic fever was the only form of heart disease mortality for which the male rate was lower than the female rate (fig. 1 and appendix table 1).

In urban areas of the United States the percentage excess of male over female heart disease mortality was markedly higher than in rural areas. The exceptions were valvular heart disease and congenital heart disease.

The age-specific death rates presented later in this study (fig. 5 and appendix table 2) illustrate the high male mortality at each age, particularly during the middle years of life. There was a slight tendency for the female rate to exceed the male rate during younger years; for example, for acute rheumatic fever at ages 5-14, for acute endocarditis up to age 25, and for valvular heart disease up to age 45. However, the other major forms showed much higher rates for males than for females throughout all ages.

Geographic Sections

Both urban and rural mortality recorded for all diseases of the heart is slightly higher in the North than in the South and in eastern than central sections of the United States. The broad regional distribution of industrialization, as measured by the percentage employed in manufacture, is in general similar to that of mortality from heart disease (9).

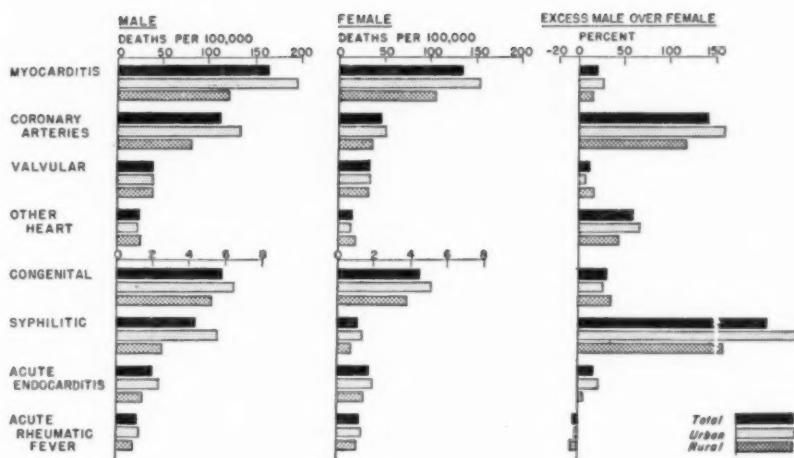


Figure 1. Male and female mortality from eight forms of heart disease and the percentage excess of male over female mortality, in urban and rural parts of the United States: white resident age-adjusted mortality in 1940.

Mortality rates for each of the specific forms of heart disease in nine geographic sections are given in the appendix table 1. The present discussion, however, will be limited to a North-South comparison in the eastern section of the United States, that is, the States east of the Mississippi River. The New England, Middle Atlantic, and East North Central regions have been combined to form the North; the South Atlantic and East South Central regions, the South. These two regions accounted for 69 percent of the total white population in the United States in 1940.¹

Mortality from all but one of the specific forms of heart disease is higher in the North than in the South sections of the eastern United States, whether we consider the rates for males or for females (fig. 2 and appendix table 2). Mortality from diseases of the myocardium shows the greatest difference in rates, with the rates in the South being less than two-thirds as high as those in the North. This is the chief factor in the North-South relationship noted above for all forms of heart disease.

Mortality from the subgroup, other diseases of the heart, was the one form with consistently higher rates in the South than in the North. This is undoubtedly related to a progressive increase in recording of deaths without mention of a specific form of heart disease in the more rural areas as compared with large urban centers.

Among urban males several other specific forms of heart disease also showed higher mortality rates in the North than in the South.

¹ The two West Central geographic sections comprised 20 percent of the white population; the Mountain and Pacific sections, 11 percent. Combined as the West, such a nonhomogeneous region does not lend itself to a North-South comparison that has meaning.

These included deaths from diseases of the coronary arteries, and to a lesser extent those from congenital heart disease and syphilitic heart disease. Only the first of these had a significant difference in rates and made a major contribution to the relatively high rates of mortality from all forms of heart disease observed for males in small cities of the South (9).

Population Size

Recorded mortality from diseases of the heart (all forms) is known to decline as size of city decreases, with clearly marked urban-rural differences. The extent of industrialization and related factors such as income and availability of medical facilities and services are correlated with heart disease mortality when size of city is held constant (9).

The major component, diseases of the myocardium, is shown in figure 1 as having a rural rate of only about two-thirds that of urban parts of the United States. The ratio of the rural to the urban death rates, expressed as a percentage, is given below for each of the specific forms of heart disease.

| | <i>Rural rate as percentage of urban rate</i> | |
|--|---|---------------|
| | <i>Male</i> | <i>Female</i> |
| Diseases of the myocardium | 62 | 69 |
| Diseases of the coronary arteries | 61 | 73 |
| Chronic affections of the valves and endocardium | 102 | 96 |
| Other diseases of the heart | 117 | 136 |
| Congenital heart disease | 82 | 79 |
| Syphilitic heart disease | 44 | 57 |
| Acute endocarditis | 64 | 74 |
| Acute rheumatic fever | 81 | 88 |

Similar differences between the urban and the rural rates are apparent in figure 2, where geographic section is held constant.

The steady decline in mortality from diseases of the myocardium with varying size-of-city groups may be seen in the following data from appendix table 1 for white males in the United States in 1940. There were 227 deaths from that cause per 100,000 population in the largest cities (those with 100,000 or more population), 171 in the middle-sized group (cities with 10,000-100,000 population), and 158 in the small cities (2,500-10,000 population). Thus the total urban rate was 196 deaths per 100,000 population as compared with a rural rate of only 122. Female rates followed this same pattern of decline as size of city decreased.

Deaths from diseases of the coronary arteries and from acute endocarditis showed similar differences between urban and rural rates. Recorded mortality was higher in cities of all sizes than in rural areas, but the decline among the cities was not always consistent with population size.

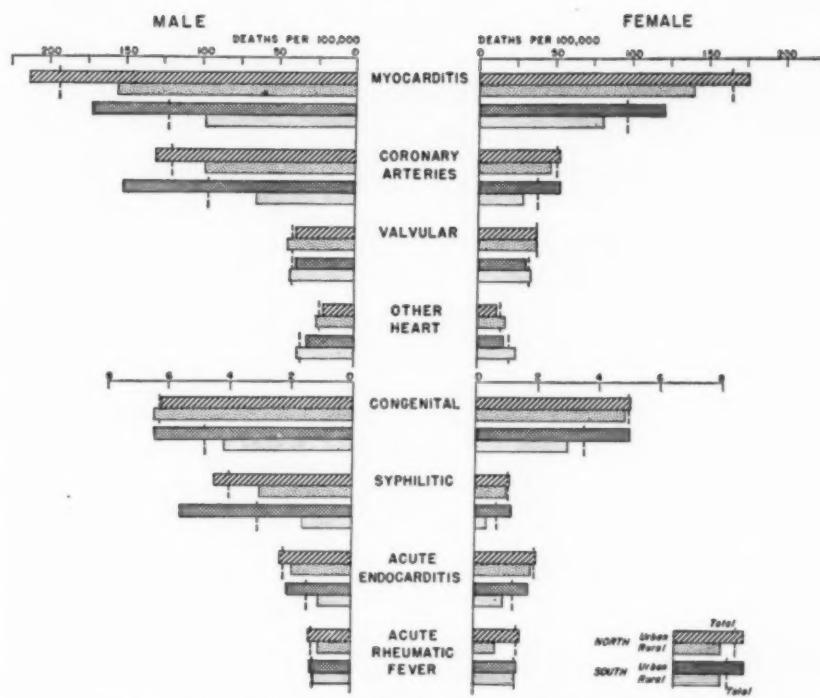


Figure 2. Male and female mortality from eight forms of heart disease in urban and rural parts of the North and South sections of the eastern United States: white resident age-adjusted mortality in 1940.

Valvular heart disease among males and other diseases of the heart among both sexes were the only specific forms that had recorded mortality rates higher in rural than in urban areas. The latter rate bore an inverse relationship to size of city, as discussed previously.

Variation With Age

There is considerable overlapping in the ages of high mortality of the several forms of heart disease, but within broad limits certain subgroups are associated with different age periods of the life span. Figures 3 and 4, based on appendix table 2, show by age the percentage distribution of heart disease deaths classified as due to each of the eight specific forms.

Congenital heart disease occurs mainly in persons under 5 years of age. In that age group it accounts for 91 percent of mortality from all forms of heart and closely related diseases. From 5 to 35 years of age, valvular heart disease is the major cause of heart disease mortality and is responsible for almost half of the deaths from all forms. From 35 to 65 years, mortality from diseases of the coronary arteries is a relatively large part of the total, as much as 44 percent among men.

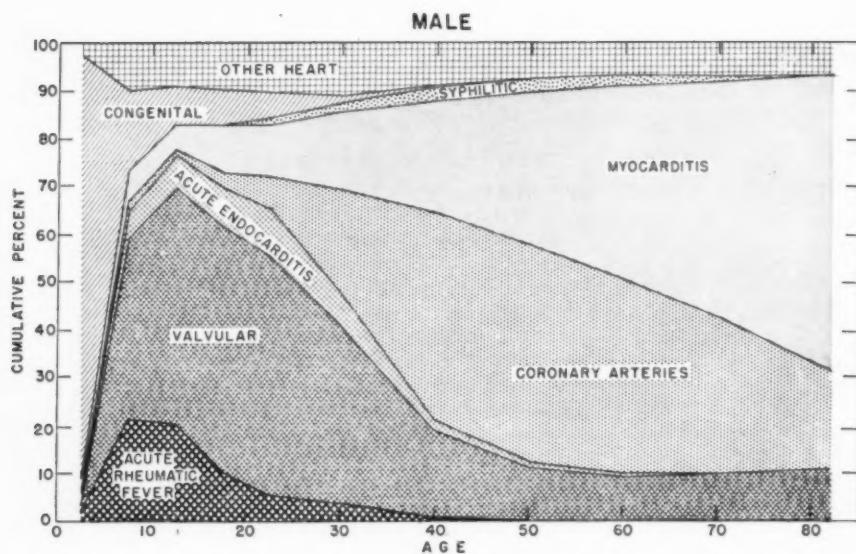


Figure 3. Proportion of heart disease deaths from each of eight forms among males by age group: white resident age-adjusted mortality in the United States, 1940.

At 65 years and over, diseases of the myocardium form the major portion of heart disease mortality—nearly two-thirds of the heart disease deaths among women.

Acute rheumatic fever appears as the second most important of these eight causes of heart disease mortality in the young ages, 5-19

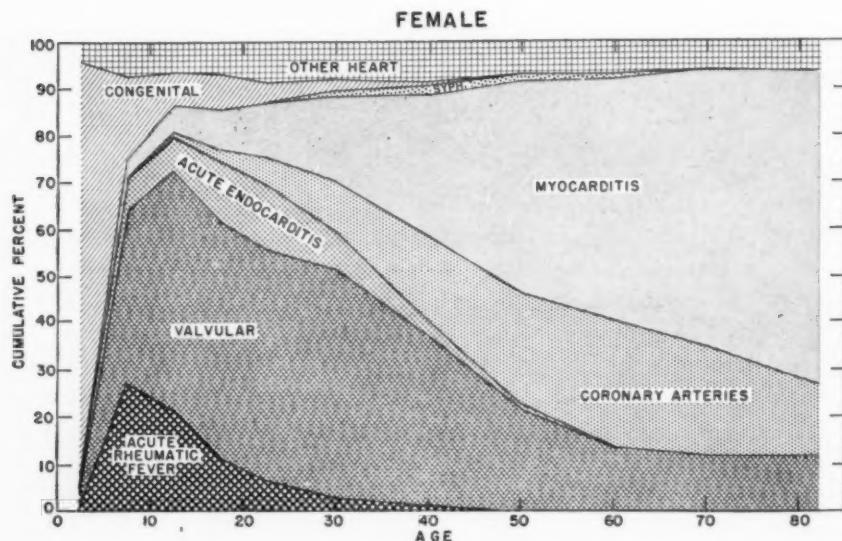


Figure 4. Proportion of heart disease deaths from each of eight forms among females by age group: white resident age-adjusted mortality in the United States, 1940.

years. Deaths from acute endocarditis are associated with young adulthood, and those from syphilitic heart disease, with the middle-adult ages.

In paper V of this series (10), it has been shown that the age-specific mortality curve for females for diseases of the heart (all forms) plots as a straight line on semilogarithmic paper from the ages of 30 to 80 years. The straightness of the line indicates that the

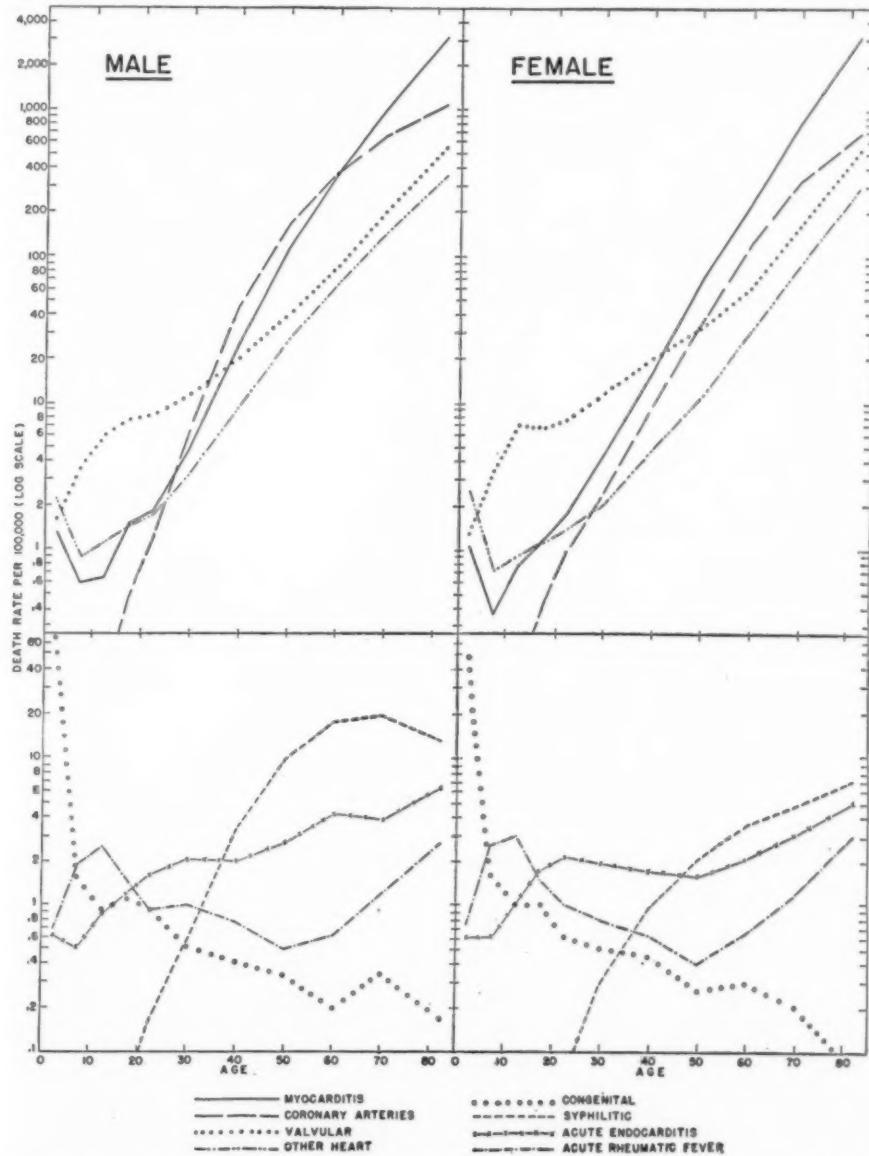


Figure 5. Age-specific mortality from eight forms of heart disease among white males and females in the United States, 1940.

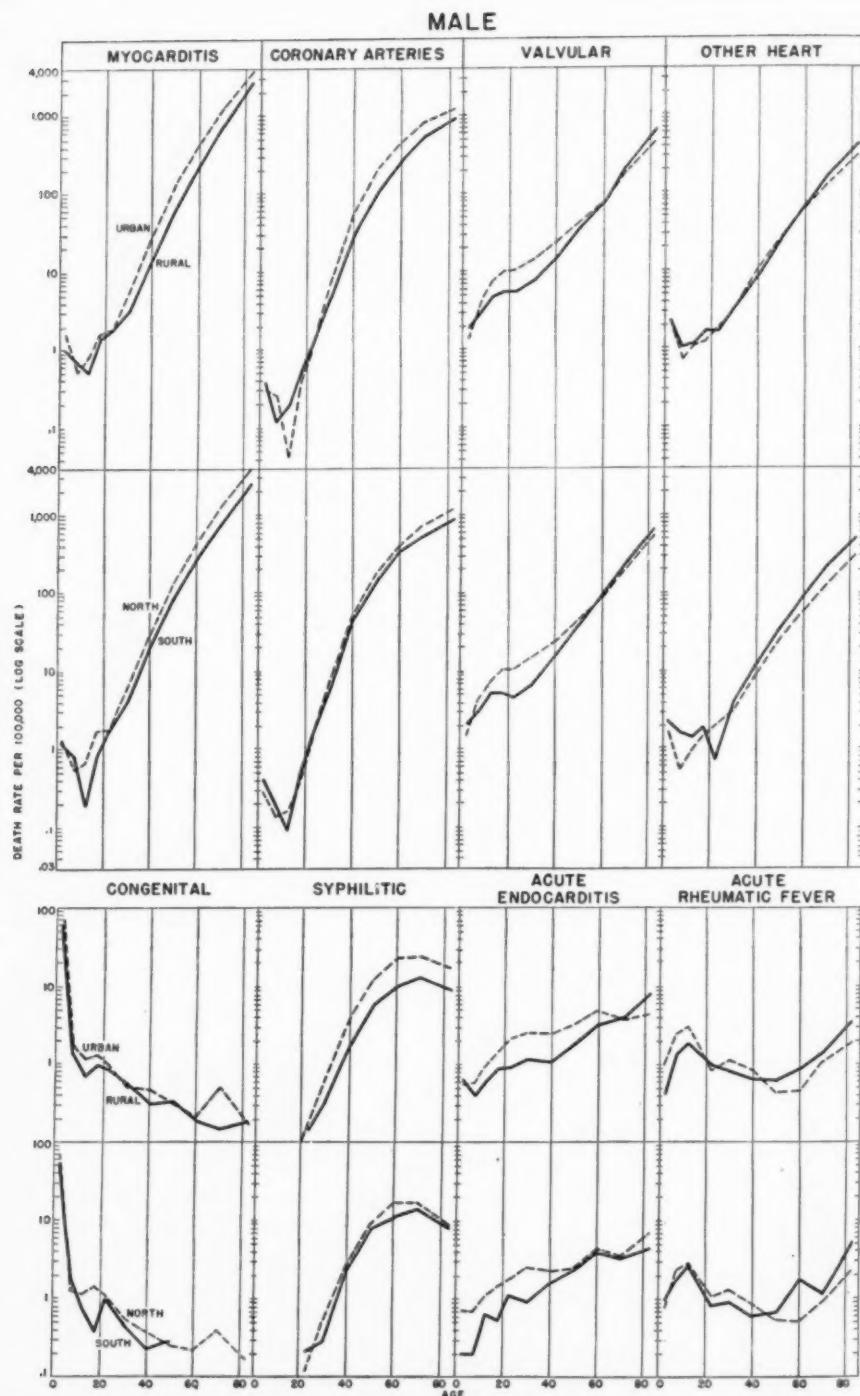


Figure 6. Age-specific male mortality from eight forms of heart disease in urban and rural parts of the United States and in North and South sections of the eastern United States: white resident mortality in 1940.

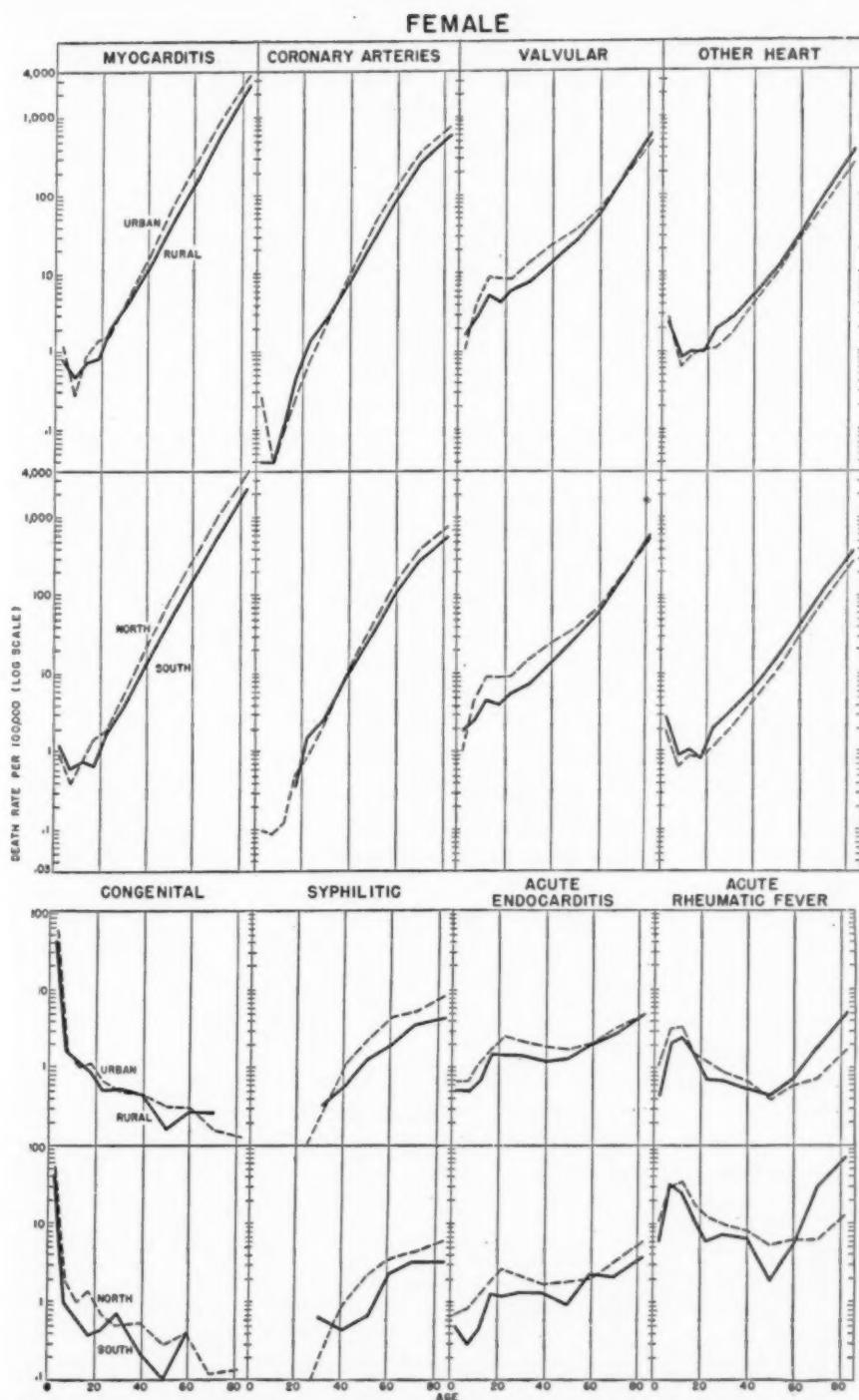


Figure 7. Age-specific female mortality from eight forms of heart disease in urban and rural parts of the United States and in North and South sections of the eastern United States: white resident mortality in 1940.

death rate increases at a constant percentage during this long age range. The corresponding curve for males rises more sharply during the adult years and then flattens off although it always keeps above the female rate.

The age-specific mortality curves for males and for females for each of the eight forms of heart disease are given on semilogarithmic grids in figure 5, based on appendix table 2. The four major forms illustrated in the top part of the figure show rapid increases with age from approximately 15 years onward. The curves for diseases of the coronary arteries bow upward throughout the adult ages but above age 60 the increase is at a much slower rate, especially for males. Deaths from diseases of the myocardium show a similar pattern, but the curves continue to rise at a faster rate than those for diseases of the coronary arteries. On the other hand, mortality from valvular heart disease has a plateau at ages 15-24 years, with acceleration in the rates throughout the balance of the life span. Beyond age 50, deaths from the subgroup, other diseases of the heart, show increased percentage changes for females but some retardation in the rise of the rates for males.

Acute endocarditis presents a curve of mortality that is different in shape from the four major forms of heart disease. Mortality from this cause is relatively high at ages 20-34 years, with only a slow increase in rates thereafter.

Deaths from acute rheumatic fever have their peak at ages 10-14 years. Then the mortality declines until age 50. After that it begins to increase, reaching the former peak level again in the oldest age groups.

The curve for congenital heart disease shows a rapid decline in mortality after its peak in the youngest age group. The curve for syphilitic heart disease mortality pictures the steady percentage increase for males during young adulthood, with some retardation during the older years of life.

Figures 6 and 7 illustrate for different age groups of males and females in the United States the urban-rural relationships discussed previously for all ages combined; the basic data are in appendix table 2. The higher urban rates at a specific period of life result in an age distribution that is younger in urban than in rural areas, particularly throughout the middle-adult years. This results in a lower mean age at death in cities.

The age-specific mortality curves for diseases of the myocardium, diseases of the coronary arteries, and syphilitic heart disease all show the urban rates as being higher than the rural rates at a given age during the middle and older years. The same pattern of higher urban mortality during the middle period of life is apparent for valvular heart disease and acute endocarditis, but there is a reversal during

the older years, with higher rural than urban mortality. The reversal in the older age groups occurs also for acute rheumatic fever, although both that form and congenital heart disease show higher urban rates during the young ages. Deaths from the subgroup, other diseases of the heart, have higher rural rates at nearly every age as would be expected from the nature of the classification.

The age-specific mortality rates for the North and South sections of the United States east of the Mississippi River are also illustrated in figures 6 and 7. The marked similarity between the two sets of curves given in these figures is apparent with the North and urban rates higher than their corresponding South and rural rates for a specific-age group.

Data on the urban-rural rates for the North and South sections are given in appendix table 2. The mortality rates for the total North tend to fall between those of the urban North and the urban South. The total South mortality curves plot between those of the rural North and the rural South. Thus the North and South mortality rates are a function of the degree of rurality with the North curve weighted in favor of urban areas and the South curve, in favor of rural areas.

Summary

Broad groups of specific forms of mortality from heart and closely related diseases have been set up according to a classification of the National Office of Vital Statistics. The eight forms in order of their magnitude among white males and females in the United States in 1940 are: diseases of the myocardium, diseases of the coronary arteries, chronic affections of the valves and endocardium, other diseases of the heart, congenital heart disease, syphilitic heart disease, acute endocarditis, and acute rheumatic fever.

Seven of the eight forms of heart disease showed a higher mortality for men of all ages (adjusted) than for women, the exception being acute rheumatic fever. Mortality from all but the subgroup, other diseases of the heart, was higher in the North than in the South sections of the Eastern United States. Recorded mortality tended to be higher in urban than in rural areas. Some of the specific forms of heart disease showed a pattern of steady decline as size of city decreased.

The association of mortality from the eight forms of heart disease with certain periods of life is established in graphic form. Death from congenital heart disease occurs mainly under 5 years of age. The major cause of heart mortality from 5 to 35 years is valvular heart disease; from 35 to 65 years, diseases of the coronary arteries; and over 65 years, diseases of the myocardium. Acute rheumatic fever is

in second position in the young ages, 5-19 years. Deaths from acute endocarditis are associated with young adulthood; those from syphilitic heart disease, with the middle-adult ages. Age-specific mortality rates in urban and rural parts of the United States and in North and South sections of the eastern United States are presented.

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Appendix Table 1. Mortality from 8 specific forms of heart disease by sex, population size groups, and geographic section of the United States: white resident age-adjusted¹ mortality per 100,000 population in 1940

| Geographic section and size of city | | Diseases of the coronary arteries | | | | Acute endocarditis | | | | Chronic affections of the valves and endocardium | | | | Diseases of the myocardium | | | | Other diseases of the heart | | | | Acute rheumatic fever | | | | Syphilitic heart disease | | | | Congenital heart disease | | | | | | | | | | |
|-------------------------------------|------------------|-----------------------------------|-------|--------|-------|--------------------|--------|--------|--------|--|-------|--------|------|----------------------------|-------|--------|--------|-----------------------------|--------|--------|--------|-----------------------|--------|--------|--------|--------------------------|--------|--------|--------|--------------------------|-------|--------|-------|------|------|------|------|-----|------|------|
| | | Male | | Female | | Male | | Female | | Male | | Female | | Male | | Female | | Male | | Female | | Male | | Female | | Male | | Female | | Male | | Female | | | | | | | | |
| | | 111.93 | 46.54 | 1.98 | 1.60 | 39.50 | 34.84 | 162.91 | 135.00 | 25.01 | 15.71 | 1.15 | 1.19 | 4.29 | 1.08 | 5.84 | 4.45 | 131.46 | 51.39 | 2.44 | 1.94 | 37.51 | 36.51 | 226.98 | 178.36 | 19.89 | 12.15 | 1.20 | 1.33 | 6.75 | 1.58 | 5.82 | 4.46 | | | | | | | |
| United States | 100,000 and over | 111.93 | 46.54 | 1.98 | 1.60 | 39.50 | 34.84 | 162.91 | 135.00 | 25.01 | 15.71 | 1.15 | 1.19 | 4.29 | 1.08 | 5.84 | 4.45 | 131.46 | 51.39 | 2.44 | 1.94 | 37.51 | 36.51 | 226.98 | 178.36 | 19.89 | 12.15 | 1.20 | 1.33 | 6.75 | 1.58 | 5.82 | 4.46 | | | | | | | |
| 100,000-100,000 | 110.92 | 45.53 | 1.97 | 1.59 | 38.92 | 34.28 | 170.64 | 134.81 | 24.60 | 14.56 | 1.23 | 1.22 | 4.18 | 1.03 | 6.81 | 4.54 | 130.91 | 50.39 | 2.20 | 1.92 | 41.03 | 33.58 | 158.09 | 119.10 | 23.03 | 17.83 | 1.24 | 1.24 | 4.65 | 1.87 | 7.33 | 5.60 | | | | | | | | |
| 2,500-10,000 | 113.91 | 53.28 | 2.05 | 1.72 | 41.03 | 33.58 | 158.09 | 119.10 | 23.03 | 17.83 | 1.56 | 1.56 | 1.24 | 1.24 | 4.65 | 1.87 | 7.33 | 5.54 | 139.62 | 37.96 | 1.48 | 1.39 | 39.63 | 33.90 | 122.10 | 105.49 | 27.08 | 18.66 | 1.02 | 1.10 | 2.56 | 1.74 | 3.22 | 3.83 | | | | | | |
| Under 2,500 and rural | 82.43 | 37.96 | 1.48 | 1.39 | 39.63 | 33.90 | 122.10 | 105.49 | 27.08 | 18.66 | 1.02 | 1.10 | 1.10 | 1.10 | 1.74 | 1.22 | 7.90 | 5.60 | 142.18 | 58.13 | 2.35 | 1.99 | 41.47 | 38.96 | 179.82 | 157.95 | 22.34 | 13.47 | 1.00 | .83 | 3.54 | .79 | 6.80 | 5.00 | | | | | | |
| New England | 100,000 and over | 143.43 | 60.18 | 2.86 | 2.18 | 39.44 | 41.65 | 242.02 | 204.24 | 17.81 | 12.98 | 1.98 | 1.95 | 3.14 | 1.64 | 7.81 | 5.28 | 150.72 | 60.18 | 2.86 | 1.86 | 38.53 | 38.53 | 175.83 | 152.75 | 20.49 | 17.81 | 1.80 | 1.80 | 6.45 | 3.45 | 7.81 | 5.28 | | | | | | | |
| 10,000-100,000 | 122.50 | 57.21 | 2.62 | 2.12 | 43.74 | 35.83 | 137.29 | 123.71 | 25.85 | 19.95 | 1.13 | 1.13 | .77 | .77 | 3.30 | 1.64 | 7.81 | 5.28 | 122.50 | 57.21 | 2.62 | 2.12 | 44.93 | 35.83 | 127.17 | 122.63 | 26.24 | 25.14 | 1.15 | 1.15 | 2.37 | 1.10 | 6.19 | 4.01 | | | | | | |
| 2,500-10,000 | 132.18 | 54.01 | 2.11 | 1.59 | 42.57 | 41.58 | 228.15 | 192.12 | 16.81 | 11.52 | 1.61 | 1.61 | 1.54 | 1.54 | 4.25 | 1.11 | 8.80 | 5.65 | 127.43 | 52.79 | 2.34 | 1.86 | 42.57 | 41.58 | 228.15 | 192.12 | 12.09 | 8.70 | 1.64 | 1.64 | 5.42 | 1.39 | 5.53 | 4.65 | | | | | | |
| Under 2,500 and rural | 138.79 | 52.11 | 2.64 | 1.73 | 41.11 | 38.76 | 216.21 | 159.67 | 17.92 | 11.71 | 1.84 | 1.84 | 1.60 | 1.60 | 4.94 | 1.41 | 9.41 | 6.50 | 132.18 | 54.01 | 2.11 | 1.59 | 39.81 | 43.00 | 265.93 | 222.94 | 12.09 | 8.70 | 1.84 | 1.84 | 5.41 | 1.39 | 5.53 | 4.65 | | | | | | |
| Middle Atlantic | 100,000 and over | 122.18 | 52.79 | 2.34 | 1.86 | 42.57 | 41.58 | 228.15 | 192.12 | 16.81 | 11.52 | 1.61 | 1.61 | 1.54 | 1.54 | 4.25 | 1.11 | 8.80 | 5.65 | 127.43 | 52.79 | 2.34 | 1.86 | 42.57 | 41.58 | 228.15 | 192.12 | 12.09 | 8.70 | 1.64 | 1.64 | 5.42 | 1.39 | 5.53 | 4.65 | | | | | |
| 10,000-100,000 | 132.69 | 54.72 | 2.64 | 2.04 | 41.11 | 38.76 | 216.21 | 159.67 | 17.92 | 11.71 | 1.84 | 1.84 | 1.60 | 1.60 | 4.94 | 1.41 | 9.41 | 6.50 | 132.69 | 54.72 | 2.64 | 2.04 | 41.11 | 38.76 | 216.21 | 159.67 | 20.49 | 17.92 | 1.80 | 1.80 | 5.41 | 1.39 | 5.53 | 4.65 | | | | | | |
| 2,500-10,000 | 107.55 | 50.30 | 2.41 | 2.02 | 46.63 | 42.34 | 202.53 | 180.12 | 21.76 | 15.59 | 1.26 | 1.30 | 1.30 | 1.30 | 3.26 | .80 | 6.53 | 5.25 | 107.55 | 50.30 | 2.41 | 2.02 | 46.63 | 42.34 | 202.53 | 180.12 | 21.76 | 15.59 | 1.26 | 1.30 | 3.26 | .80 | 6.53 | 5.25 | | | | | | |
| Under 2,500 and rural | 110.57 | 45.17 | 2.63 | 2.13 | 49.00 | 39.36 | 166.66 | 140.88 | 28.06 | 18.16 | 1.13 | 1.13 | 1.32 | 1.32 | 3.98 | 1.12 | 6.60 | 4.87 | 112.57 | 46.17 | 2.63 | 2.13 | 49.00 | 39.36 | 166.66 | 140.88 | 28.06 | 18.16 | 1.13 | 1.13 | 1.32 | 1.32 | 3.98 | 1.12 | 6.60 | 4.87 | | | | |
| East North Central | 100,000 and over | 110.57 | 45.17 | 2.63 | 2.13 | 49.00 | 39.36 | 166.66 | 140.88 | 28.06 | 18.16 | 1.13 | 1.13 | 1.32 | 1.32 | 3.98 | 1.12 | 6.60 | 4.87 | 110.57 | 45.17 | 2.63 | 2.13 | 49.00 | 39.36 | 166.66 | 140.88 | 28.06 | 18.16 | 1.13 | 1.13 | 1.32 | 1.32 | 3.98 | 1.12 | 6.60 | 4.87 | | | |
| 10,000-100,000 | 125.23 | 50.49 | 2.46 | 2.08 | 43.70 | 35.12 | 228.63 | 208.44 | 29.50 | 17.46 | 1.01 | 1.01 | 1.46 | 1.46 | 5.50 | 1.52 | 8.07 | 5.78 | 125.23 | 50.49 | 2.46 | 2.08 | 43.70 | 35.12 | 228.63 | 208.44 | 29.50 | 17.46 | 1.01 | 1.01 | 1.46 | 1.46 | 5.50 | 1.52 | 8.07 | 5.78 | | | | |
| 2,500-10,000 | 117.08 | 43.55 | 1.71 | 1.53 | 41.11 | 38.76 | 32.59 | 30.59 | 160.70 | 136.96 | 26.98 | 21.96 | 1.43 | 1.43 | 1.36 | 1.36 | 3.55 | .83 | 8.07 | 5.78 | 117.08 | 43.55 | 1.71 | 1.53 | 41.11 | 38.76 | 32.59 | 30.59 | 160.70 | 136.96 | 26.98 | 21.96 | 1.43 | 1.43 | 1.36 | 1.36 | 3.55 | .83 | 8.07 | 5.78 |
| Under 2,500 and rural | 86.96 | 41.12 | 1.73 | 1.59 | 42.10 | 38.69 | 132.69 | 117.60 | 27.73 | 19.60 | 1.25 | 1.25 | 1.39 | 1.39 | 3.02 | .72 | 9.59 | 6.52 | 86.96 | 41.12 | 1.73 | 1.59 | 42.10 | 38.69 | 132.69 | 117.60 | 27.73 | 19.60 | 1.25 | 1.25 | 1.39 | 1.39 | 3.02 | .72 | 9.59 | 6.52 | | | | |
| West North Central | 100,000 and over | 98.42 | 41.81 | 1.81 | 1.90 | 39.03 | 34.05 | 108.76 | 87.62 | 22.14 | 14.84 | .98 | .98 | 1.15 | 1.15 | 4.04 | 1.08 | 6.33 | 4.68 | 105.72 | 45.17 | 2.63 | 2.13 | 49.00 | 39.36 | 166.66 | 140.88 | 28.06 | 18.16 | 1.13 | 1.13 | 1.32 | 1.32 | 3.98 | 1.12 | 6.60 | 4.87 | | | |
| 10,000-100,000 | 133.28 | 50.58 | 2.25 | 1.65 | 37.70 | 34.90 | 159.32 | 117.21 | 19.69 | 12.24 | .90 | .90 | 1.86 | 1.86 | 10.23 | 2.62 | 8.07 | 5.78 | 133.28 | 50.58 | 2.25 | 1.65 | 37.70 | 34.90 | 159.32 | 117.21 | 19.69 | 12.24 | .90 | .90 | 1.86 | 1.86 | 10.23 | 2.62 | 8.07 | 5.78 | | | | |
| 2,500-10,000 | 128.26 | 49.79 | 2.85 | 2.19 | 42.99 | 35.15 | 131.26 | 98.95 | 25.34 | 20.07 | .95 | .95 | 1.43 | 1.43 | 4.46 | 1.20 | 8.46 | 6.52 | 128.26 | 49.79 | 2.85 | 2.19 | 42.99 | 35.15 | 131.26 | 98.95 | 25.34 | 20.07 | .95 | .95 | 1.43 | 1.43 | 4.46 | 1.20 | 8.46 | 6.52 | | | | |
| Under 2,500 and rural | 74.90 | 33.59 | 1.82 | 2.17 | 35.64 | 35.64 | 92.55 | 71.78 | 21.17 | 21.17 | .95 | .95 | 1.28 | 1.28 | 4.46 | 1.20 | 8.46 | 6.52 | 74.90 | 33.59 | 1.82 | 2.17 | 35.64 | 35.64 | 92.55 | 71.78 | 21.17 | 21.17 | .95 | .95 | 1.28 | 1.28 | 4.46 | 1.20 | 8.46 | 6.52 | | | | |
| South Atlantic | 100,000 and over | 106.64 | 41.10 | 1.87 | 1.47 | 39.75 | 32.95 | 135.74 | 106.62 | 34.38 | 20.27 | 1.28 | 1.28 | 1.25 | 1.25 | 3.37 | .76 | 4.95 | 3.78 | 145.70 | 52.37 | 3.10 | 2.40 | 37.53 | 30.92 | 199.72 | 147.59 | 20.47 | 13.75 | 1.25 | 1.25 | 1.25 | 1.25 | 3.37 | .76 | 4.95 | 3.78 | | | |
| 10,000-100,000 | 120.63 | 53.71 | 2.66 | 2.19 | 35.64 | 35.64 | 92.55 | 71.78 | 21.17 | 21.17 | .95 | .95 | 1.28 | 1.28 | 4.46 | 1.20 | 8.46 | 6.52 | 120.63 | 53.71 | 2.66 | 2.19 | 35.64 | 35.64 | 92.55 | 71.78 | 21.17 | 21.17 | .95 | .95 | 1.28 | 1.28 | 4.46 | 1.20 | 8.46 | 6.52 | | | | |
| 2,500-10,000 | 75.66 | 32.25 | 1.37 | 1.89 | 37.59 | 32.91 | 85.68 | 71.78 | 20.42 | 15.31 | .85 | .85 | 1.15 | 1.15 | 3.02 | .40 | 9.58 | 7.26 | 106.64 | 41.10 | 1.87 | 1.47 | 39.75 | 32.95 | 135.74 | 106.62 | 34.38 | 20.27 | 1.28 | 1.28 | 1.25 | 1.25 | 3.37 | .76 | 4.95 | 3.78 | | | | |
| Under 2,500 and rural | 137.00 | 54.43 | 2.11 | 1.69 | 37.59 | 32.91 | 85.68 | 71.78 | 20.42 | 15.31 | .85 | .85 | 1.15 | 1.15 | 3.02 | .40 | 9.58 | 7.26 | 137.00 | 54.43 | 2.11 | 1.69 | 37.59 | 32.91 | 85.68 | 71.78 | 20.42 | 15.31 | .85 | .85 | 1.15 | 1.15 | 3.02 | .40 | 9.58 | 7.26 | | | | |

See footnote at end of table.

Appendix Table 1. Mortality from 8 specific forms of heart disease by sex, population size groups, and geographic section of the United States: white resident age-adjusted¹ mortality per 100,000 population in 1940—Continued

| Geographic section and size of city | | Diseases of the coronary arteries | | | | Acute endocarditis | | | | Chronic affections of the valves and endocardium | | | | Diseases of the myocardium | | | | Other diseases of the heart | | | | Congenital heart disease | | | |
|-------------------------------------|--|-----------------------------------|--------|-------|--------|--------------------|--------|--------|--------|--|--------|-------|--------|----------------------------|--------|------|--------|-----------------------------|--------|------|--------|--------------------------|--------|--|--|
| | | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | | |
| East South Central | | 79.41 | 35.68 | .84 | .83 | 43.64 | 34.75 | 103.35 | 81.99 | 35.71 | 23.43 | 1.28 | 2.72 | .52 | 4.56 | 3.12 | | | | | | | | | |
| 100,000 and over | | 171.22 | 59.17 | .93 | .93 | 2.03 | 2.76 | 22.12 | 162.78 | 124.54 | 28.08 | 15.76 | 3.43 | 4.26 | .86 | 7.61 | 3.87 | | | | | | | | |
| 10,000-100,000 | | 52.25 | 1.78 | 50.50 | 38.77 | 168.97 | 116.16 | 34.25 | 17.52 | .54 | 2.21 | 8.48 | 1.00 | 6.97 | 5.80 | | | | | | | | | | |
| 2,500-10,000 | | 139.96 | 55.33 | 2.10 | .36 | 48.74 | 38.46 | 132.18 | 84.59 | 38.76 | 26.24 | .67 | .67 | 4.62 | .33 | 7.61 | 3.65 | | | | | | | | |
| Under 2,500 and rural | | 135.94 | 55.33 | 2.10 | .32 | 44.46 | 36.10 | 83.26 | 66.87 | 36.59 | 25.71 | 1.37 | .96 | 1.42 | .39 | 3.80 | 2.73 | | | | | | | | |
| West South Central | | 94.65 | 40.26 | 1.51 | 1.14 | 28.98 | 23.84 | 105.02 | 81.13 | 38.88 | 20.86 | .74 | 1.02 | 4.00 | 1.76 | 4.46 | 3.55 | | | | | | | | |
| 100,000 and over | | 155.77 | 57.89 | 2.97 | 1.44 | 28.29 | 26.64 | 194.07 | 130.41 | 46.82 | 17.69 | .60 | .67 | 10.45 | 1.19 | 6.27 | 4.55 | | | | | | | | |
| 10,000-100,000 | | 56.33 | 2.12 | 2.13 | 2.13 | 26.93 | 21.42 | 135.45 | 93.86 | 42.07 | 20.28 | .68 | .80 | 6.47 | .79 | 5.00 | 4.45 | | | | | | | | |
| 2,500-10,000 | | 132.70 | 46.20 | 1.53 | 1.55 | 34.89 | 21.88 | 137.21 | 91.55 | 45.32 | 24.53 | .94 | 1.33 | 3.87 | .93 | 6.28 | 6.34 | | | | | | | | |
| Under 2,500 and rural | | 132.70 | 46.20 | 1.53 | 1.57 | 28.34 | 21.32 | 137.05 | 91.65 | 45.32 | 24.53 | .94 | 1.33 | 3.87 | .93 | 6.28 | 6.34 | | | | | | | | |
| Mountain | | 60.05 | 28.50 | .97 | .70 | 28.34 | 21.32 | 59.09 | 34.66 | 21.18 | .78 | 1.15 | 1.76 | .56 | 3.74 | 2.70 | | | | | | | | | |
| 100,000 and over | | 93.67 | 36.89 | 2.27 | 2.10 | 40.26 | 38.16 | 131.26 | 103.65 | 24.07 | 16.07 | 1.40 | 1.03 | 4.42 | 1.17 | 6.55 | 4.76 | | | | | | | | |
| 10,000-100,000 | | 117.28 | 34.38 | 3.97 | 4.47 | 34.59 | 44.52 | 165.34 | 123.28 | 18.38 | 16.31 | .93 | 1.77 | 6.49 | 1.73 | 8.90 | 8.90 | | | | | | | | |
| 2,500-10,000 | | 123.36 | 50.39 | 3.06 | 2.12 | 46.40 | 36.09 | 166.86 | 116.41 | 26.33 | 17.35 | 1.11 | .56 | 6.43 | 2.15 | 6.90 | 7.64 | | | | | | | | |
| Under 2,500 and rural | | 134.52 | 43.57 | 1.84 | 2.25 | 63.32 | 50.47 | 158.22 | 109.10 | 33.70 | 17.80 | 1.41 | 1.67 | 5.39 | .82 | 9.50 | 5.62 | | | | | | | | |
| Pacific | | 68.78 | 29.28 | 1.83 | 1.47 | 34.10 | 33.74 | 105.12 | 88.85 | 22.46 | 14.88 | 1.57 | .95 | 3.09 | .99 | 5.48 | 3.83 | | | | | | | | |
| 100,000 and over | | 126.06 | 48.08 | 2.05 | 1.28 | 37.95 | 29.46 | 183.82 | 126.29 | 15.86 | 9.85 | .56 | .59 | 8.16 | 1.97 | 6.71 | 4.62 | | | | | | | | |
| 10,000-100,000 | | 136.89 | 48.58 | 1.56 | 2.92 | 1.56 | 38.69 | 28.89 | 200.93 | 132.22 | 14.59 | 9.58 | .31 | .52 | 10.66 | 2.22 | 6.17 | 4.55 | | | | | | | |
| 2,500-10,000 | | 148.43 | 55.44 | 1.85 | 1.88 | 38.70 | 27.99 | 189.84 | 120.70 | 15.77 | 9.48 | .77 | .55 | 6.81 | 1.82 | 8.07 | 5.59 | | | | | | | | |
| Under 2,500 and rural | | 143.38 | 50.21 | 2.02 | 1.18 | 46.26 | 33.85 | 189.11 | 124.29 | 21.12 | 13.00 | 1.50 | .77 | 11.23 | 2.57 | 7.61 | 5.43 | | | | | | | | |

¹ Adjusted for age by the direct method to the population of the United States enumerated in 1940.

Appendix Table 2. Mortality from 8 specific forms of heart disease by sex, age, urbanization, and geographic section of the United States: white resident mortality per 100,000 population in 1940

| Age | Male | | | | Female | | | |
|---|-----------------------------------|-------------------------|--|-----------------------------|----------------------------|-----------------------------|----------------------------------|-------|
| | Diseases of the coronary arteries | Acute endo- carditis | Chronic affec- tions of the valves and endo- cardium | Other diseases of the heart | Acute rheu- matic fever | Syphilitic heart disease | Congeni- tal heart disease | |
| TOTAL UNITED STATES | | | | | | | | |
| All ages----- | 111.93 | 1.98 | 39.50 | 162.91 | 25.01 | 1.15 | 4.29 | 5.84 |
| Under 5----- | 34 | .62 | 3.44 | 1.50 | 1.30 | 2.23 | .70 | .15 |
| 5-9----- | 19 | .51 | 6.07 | .65 | 1.10 | 2.49 | .08 | .04 |
| 10-14----- | 47 | 1.18 | 1.84 | 7.71 | 1.49 | 1.54 | .04 | .12 |
| 15-19----- | 117 | 2.26 | 8.60 | 1.80 | 1.45 | 1.54 | .16 | .17 |
| 20-24----- | 117 | 2.03 | 6.39 | 11.33 | 4.89 | 1.72 | .92 | .16 |
| 25-34----- | 63 | 2.03 | 2.03 | 11.33 | 3.31 | 1.00 | .04 | .02 |
| 35-44----- | 47 | 3.66 | 1.94 | 20.12 | 25.26 | 9.54 | .78 | .318 |
| 45-54----- | 145.66 | 2.65 | 40.31 | 114.31 | 26.95 | .50 | 9.82 | .33 |
| 55-64----- | 373.71 | 4.26 | 84.28 | 84.22 | 64.93 | .62 | 17.46 | .20 |
| 65-74----- | 671.22 | 3.84 | 203.37 | 1.038.42 | 144.54 | 1.19 | 18.97 | .34 |
| 75 and over--- | 1,075.61 | 6.37 | 532.82 | 3,206.87 | 354.81 | 2.67 | 13.08 | .17 |
| URBAN UNITED STATES—CITIES AND TOWNS OF 2,500 AND OVER POPULATION | | | | | | | | |
| All ages----- | 134.49 | 2.33 | 38.75 | 196.35 | 23.09 | 1.28 | 5.56 | 6.47 |
| Under 5----- | 30 | .56 | 1.34 | 1.60 | 2.25 | 1.00 | ----- | ----- |
| 5-9----- | 26 | .60 | 4.02 | .62 | .73 | 2.51 | ----- | ----- |
| 10-14----- | 94 | 1.05 | 7.42 | .79 | 1.09 | 3.07 | .07 | .04 |
| 15-19----- | 42 | 1.45 | 9.75 | 1.56 | 1.25 | 1.73 | .07 | .11 |
| 20-24----- | 120 | 2.13 | 10.29 | 1.78 | 1.78 | .89 | .17 | .11 |
| 25-34----- | 737 | 2.61 | 13.92 | 5.92 | 3.26 | 1.13 | .69 | .51 |
| 35-44----- | 57.95 | 2.49 | 23.56 | 31.19 | 10.07 | .85 | 4.05 | .42 |
| 45-54----- | 204.06 | 3.18 | 43.62 | 143.42 | 27.32 | .43 | 12.42 | .32 |
| 55-64----- | 464.58 | 4.96 | 85.90 | 467.36 | 63.79 | .45 | 23.15 | .21 |
| 65-74----- | 805.01 | 3.78 | 190.29 | 1.281.99 | 129.34 | 1.03 | 24.61 | .51 |
| 75 and over--- | 1,229.07 | 4.52 | 450.35 | 3,086.55 | 266.01 | 1.84 | 17.24 | .17 |
| All ages----- | 134.49 | 2.33 | 38.75 | 196.35 | 23.09 | 1.28 | 5.56 | 6.47 |
| Under 5----- | 30 | .56 | 1.34 | 1.60 | 2.25 | 1.00 | ----- | ----- |
| 5-9----- | 26 | .60 | 4.02 | .62 | .73 | 2.51 | ----- | ----- |
| 10-14----- | 94 | 1.05 | 7.42 | .79 | 1.09 | 3.07 | .07 | .04 |
| 15-19----- | 42 | 1.45 | 9.75 | 1.56 | 1.25 | 1.73 | .07 | .11 |
| 20-24----- | 120 | 2.13 | 10.29 | 1.78 | 1.78 | .89 | .17 | .11 |
| 25-34----- | 737 | 2.61 | 13.92 | 5.92 | 3.26 | 1.13 | .69 | .51 |
| 35-44----- | 57.95 | 2.49 | 23.56 | 31.19 | 10.07 | .85 | 4.05 | .42 |
| 45-54----- | 204.06 | 3.18 | 43.62 | 143.42 | 27.32 | .43 | 12.42 | .32 |
| 55-64----- | 464.58 | 4.96 | 85.90 | 467.36 | 63.79 | .45 | 23.15 | .21 |
| 65-74----- | 805.01 | 3.78 | 190.29 | 1.281.99 | 129.34 | 1.03 | 24.61 | .51 |
| 75 and over--- | 1,229.07 | 4.52 | 450.35 | 3,086.55 | 266.01 | 1.84 | 17.24 | .17 |

Appendix Table 2. Mortality from 8 specific forms of heart disease by sex, age, urbanization, and geographic section of the United States: white resident mortality per 100,000 population in 1940—Continued

| Age | Male | | | | Female | | | |
|---|-----------------------------------|--------------------|---|--|-----------------------------------|--------------------|---|--|
| | Diseases of the coronary arteries | Acute endocarditis | Chronic affection of the valves and endocardium | Other diseases of the myocardium and endocardium | Diseases of the coronary arteries | Acute endocarditis | Chronic affection of the valves and endocardium | Other diseases of the myocardium and endocardium |
| RURAL UNITED STATES—TOWNS OF LESS THAN 2,500 POPULATION AND RURAL AREAS | | | | | | | | |
| All ages | 82.43 | 1.48 | 39.63 | 122.10 | 27.08 | 1.02 | 2.56 | 37.96 |
| Under 5 | .38 | .67 | 1.84 | 1.00 | 2.21 | .42 | .52 | 1.39 |
| 5-9 | .12 | .41 | 2.89 | .66 | 1.03 | 1.36 | 1.32 | .04 |
| 10-14 | .19 | .62 | 1.50 | 1.12 | 1.89 | .08 | .09 | .12 |
| 15-19 | .53 | .88 | 5.45 | 1.41 | 1.68 | 1.33 | .95 | .30 |
| 20-24 | 1.14 | .91 | 5.56 | 1.82 | 1.64 | .96 | .86 | 1.30 |
| 25-34 | 4.62 | 1.16 | 7.47 | 3.35 | 3.38 | .82 | .32 | .53 |
| 35-44 | 30.59 | 1.06 | 14.68 | 15.87 | 8.70 | .66 | 1.78 | .31 |
| 45-54 | 106.06 | 1.82 | 35.17 | 69.11 | 26.38 | .62 | 5.77 | .35 |
| 55-64 | 265.51 | 3.32 | 82.10 | 246.55 | 66.46 | .84 | 9.81 | .19 |
| 65-74 | 517.72 | 3.90 | 218.39 | 758.97 | 161.99 | 1.39 | 12.50 | .15 |
| 75 and over | 913.31 | 8.32 | 661.17 | 2,680.57 | 416.99 | 3.54 | 8.68 | .18 |
| All ages | 120.23 | 2.25 | 41.00 | 193.83 | 22.57 | 1.32 | 4.03 | 6.32 |
| Under 5 | .28 | .74 | 1.54 | 1.30 | 1.67 | .75 | .10 | .73 |
| 5-9 | .14 | .73 | 4.41 | .54 | .54 | 2.41 | 1.27 | .09 |
| 10-14 | .16 | .14 | 7.24 | .67 | .98 | 2.99 | .16 | 1.14 |
| 15-19 | .37 | 1.51 | 10.33 | 1.73 | 5.11 | 1.77 | .12 | 1.40 |
| 20-24 | 1.20 | 1.86 | 10.63 | 1.78 | 1.98 | 1.08 | .12 | 1.00 |
| 25-34 | 7.29 | 2.59 | 15.01 | 5.72 | 3.01 | 1.32 | .54 | .65 |
| 35-44 | 61.77 | 2.34 | 23.50 | 29.61 | 9.15 | .85 | .37 | 10.45 |
| 45-54 | 179.39 | 2.54 | 43.79 | 131.32 | 25.07 | .65 | .25 | 40.34 |
| 55-64 | 407.02 | 4.42 | 83.80 | 43.84 | 59.24 | .52 | .22 | 140.14 |
| 65-74 | 725.81 | 3.62 | 197.70 | 124.18 | 126.27 | .92 | .17 | 367.03 |
| 75 and over | 1130.51 | 7.19 | 542.17 | 318.84 | 2.34 | 9.37 | .17 | 735.83 |
| TOTAL NORTH ¹ | | | | | | | | |
| All ages | 120.23 | 2.25 | 41.00 | 193.83 | 22.57 | 1.32 | 4.03 | 6.32 |
| Under 5 | .28 | .74 | 1.54 | 1.30 | 1.67 | .75 | .10 | .73 |
| 5-9 | .14 | .73 | 4.41 | .54 | .54 | 2.41 | 1.27 | .09 |
| 10-14 | .16 | .14 | 7.24 | .67 | .98 | 2.99 | .16 | 1.14 |
| 15-19 | .37 | 1.51 | 10.33 | 1.73 | 5.11 | 1.77 | .12 | 1.40 |
| 20-24 | 1.20 | 1.86 | 10.63 | 1.78 | 1.98 | 1.08 | .12 | 1.00 |
| 25-34 | 7.29 | 2.59 | 15.01 | 5.72 | 3.01 | 1.32 | .54 | .65 |
| 35-44 | 61.77 | 2.34 | 23.50 | 29.61 | 9.15 | .85 | .37 | 10.45 |
| 45-54 | 179.39 | 2.54 | 43.79 | 131.32 | 25.07 | .65 | .25 | 40.34 |
| 55-64 | 407.02 | 4.42 | 83.80 | 43.84 | 59.24 | .52 | .22 | 140.14 |
| 65-74 | 725.81 | 3.62 | 197.70 | 124.18 | 126.27 | .92 | .17 | 367.03 |
| 75 and over | 1130.51 | 7.19 | 542.17 | 318.84 | 2.34 | 9.37 | .17 | 735.83 |
| All ages | 120.23 | 2.25 | 41.00 | 193.83 | 22.57 | 1.32 | 4.03 | 6.32 |
| Under 5 | .28 | .74 | 1.54 | 1.30 | 1.67 | .75 | .10 | .73 |
| 5-9 | .14 | .73 | 4.41 | .54 | .54 | 2.41 | 1.27 | .09 |
| 10-14 | .16 | .14 | 7.24 | .67 | .98 | 2.99 | .16 | 1.14 |
| 15-19 | .37 | 1.51 | 10.33 | 1.73 | 5.11 | 1.77 | .12 | 1.40 |
| 20-24 | 1.20 | 1.86 | 10.63 | 1.78 | 1.98 | 1.08 | .12 | 1.00 |
| 25-34 | 7.29 | 2.59 | 15.01 | 5.72 | 3.01 | 1.32 | .54 | .65 |
| 35-44 | 61.77 | 2.34 | 23.50 | 29.61 | 9.15 | .85 | .37 | 10.45 |
| 45-54 | 179.39 | 2.54 | 43.79 | 131.32 | 25.07 | .65 | .25 | 40.34 |
| 55-64 | 407.02 | 4.42 | 83.80 | 43.84 | 59.24 | .52 | .22 | 140.14 |
| 65-74 | 725.81 | 3.62 | 197.70 | 124.18 | 126.27 | .92 | .17 | 367.03 |
| 75 and over | 1130.51 | 7.19 | 542.17 | 318.84 | 2.34 | 9.37 | .17 | 735.83 |

June 30, 1950

URBAN NORTH¹—CITIES AND TOWNS OF 2,500 AND OVER POPULATION

| All ages | 130.23 | 2.34 | 38.69 | 213.17 | 20.98 | 1.42 | 4.49 | 6.23 | 52.16 | 1.97 | 37.87 | 175.72 | 13.29 | 1.43 | 1.10 | 5.04 | |
|-------------|----------|--------|----------|----------|--------|-------|-------|--------|--------|-------|--------|----------|----------|--------|-------|-------|-----|
| Under 5 | .28 | .57 | 1.48 | 1.27 | 1.77 | .99 | .48 | 2.89 | ..... | .12 | .59 | 1.10 | 1.02 | 1.91 | 1.25 | ..... |  |
| 5-9 | .07 | .62 | 5.09 | .55 | .55 | .48 | .94 | 3.27 | ..... | 1.29 | .07 | .92 | .5.18 | 3.33 | ..... | 54.92 | |
| 10-14 | .06 | 1.11 | 8.30 | .70 | 1.73 | 1.30 | 1.95 | ..... | .12 | 1.37 | 10.37 | .71 | 3.46 | 3.33 | ..... | 1.77 | |
| 15-19 | .38 | 1.68 | 2.18 | 1.24 | 1.63 | 2.01 | 1.96 | ..... | .05 | 1.35 | .32 | 1.94 | 1.58 | .89 | ..... | .89 | |
| 20-24 | 1.09 | 2.85 | 17.06 | 6.24 | 2.79 | 1.40 | .57 | 57 | ..... | 1.25 | .80 | 2.69 | 9.99 | 1.59 | 1.44 | 1.44 | |
| 25-34 | 7.55 | 2.68 | 25.47 | 32.54 | 9.56 | 1.97 | 3.05 | 44 | ..... | 2.18 | 2.34 | 16.12 | 4.84 | 1.76 | .98 | .75 | |
| 35-44 | 197.64 | 2.70 | 44.11 | 152.18 | 24.75 | 10.20 | .55 | 10.20 | ..... | 10.55 | 1.88 | 26.92 | 21.21 | 4.19 | .85 | .45 | |
| 45-54 | 448.79 | 4.51 | 80.16 | 503.09 | 67.78 | 19.30 | .21 | 41.87 | ..... | 41.87 | 1.71 | 40.09 | 97.65 | 10.58 | .91 | .55 | |
| 55-64 | 785.23 | 3.40 | 178.33 | 1,394.55 | 117.31 | .93 | 19.30 | .27 | 147.56 | | 147.56 | 2.30 | 68.02 | 339.26 | 29.94 | .57 | .36 |
| 65-74 | 5.32 | 431.85 | 4,035.71 | 288.75 | 1.68 | 11.49 | ..... | 381.08 | ..... | 3.51 | 1.51 | 159.40 | 1,116.21 | .64 | 4.12 | .43 | |
| 75 and over | 1,199.43 | 5.32 | ..... | ..... | ..... | ..... | ..... | 746.02 | ..... | 5.29 | 508.74 | 3,921.78 | 251.90 | 1.22 | 4.39 | ..... |  |
| | | | | | | | | | | | | | | 6.92 | | | |
| | | | | | | | | | | | | | | | | .20 | |

RURAL NORTH¹—TOWNS OF LESS THAN 2,500 POPULATION AND RURAL AREAS

| All ages | 98.38 | 1.96 | 44.04 | 156.35 | 25.16 | 1.10 | 3.03 | 6.50 | 46.52 | 1.81 | 37.68 | 140.06 | 17.66 | 1.16 | 1.01 | 4.85 | |
|-------------|----------|--------|--------|----------|--------|--------|--------|-------|--------|--------|-------|--------|--------|----------|--------|-------|-------|
| Under 5 | .27 | 1.09 | 1.63 | 1.36 | 1.50 | .53 | .67 | 1.47 | ..... | .27 | 74.16 | .14 | .99 | .85 | 2.13 | ..... |  |
| 5-9 | .27 | .93 | 3.07 | .36 | 1.20 | 5.06 | .60 | 1.08 | 2.41 | .24 | 1.07 | .51 | .56 | .56 | .14 | 52.13 | |
| 10-14 | .36 | 1.20 | 5.06 | .35 | 1.16 | 7.85 | 1.73 | 1.96 | 1.39 | .39 | 1.50 | .13 | 1.15 | 1.27 | 2.10 | 2.11 | |
| 15-19 | .35 | 1.08 | 1.08 | 1.48 | 1.08 | 6.88 | 2.16 | 1.89 | 1.35 | .35 | .67 | 1.08 | 1.90 | 1.03 | 1.27 | 1.15 | |
| 20-34 | 6.57 | 1.88 | 9.38 | 35.38 | 1.40 | 17.91 | 21.34 | 7.99 | .53 | .47 | .63 | 2.67 | 1.92 | 2.46 | .92 | .62 | |
| 35-44 | 45.54 | 130.34 | 21.14 | 42.92 | 86.67 | 25.92 | .56 | 6.97 | 2.46 | .18 | 10.14 | 1.22 | 17.74 | 6.01 | .66 | .62 | |
| 45-54 | 55.64 | 314.25 | 4.22 | 91.92 | 312.20 | 62.49 | .84 | 12.30 | .12 | 12.15 | 1.51 | 2.26 | 30.16 | 68.23 | .41 | .37 | |
| 55-74 | 65.74 | 620.26 | 4.02 | 292.10 | 982.12 | 142.18 | .92 | 12.98 | .18 | 333.83 | 2.71 | 189.63 | 832.70 | 91.69 | .42 | .42 | |
| 75 and over | 1,072.86 | 9.96 | 705.56 | 3,451.84 | 363.04 | 3.33 | * 6.23 | .42 | 714.40 | .42 | 7.70 | 7.70 | 650.20 | 3,444.90 | 359.13 | 4.28 | |
| | | | | | | | | | | | | | | | | | |

TOTAL SOUTH²

| All ages | 96.34 | 1.48 | 40.97 | 123.34 | 34.91 | 1.27 | 2.28 | .99 | 1.18 | .20 | 39.07 | 1.23 | 32.57 | 97.47 | 21.44 | 1.26 | .67 | 3.52 |
|-------------|--------|------|--------|----------|--------|-------|-------|-------|-------|-------|-------|--------|-------|--------|----------|-------|-------|-------|
| Under 5 | .40 | .20 | 2.08 | 1.19 | 2.28 | 1.77 | 1.67 | 1.67 | 1.67 | ..... | 54.29 | .13 | .51 | 1.84 | 2.77 | 2.77 | ..... | ..... |
| 5-9 | .20 | .20 | 3.15 | .79 | 1.48 | .79 | 1.48 | .79 | 1.48 | ..... | 1.18 | ..... | .30 | 2.53 | .91 | 3.14 | ..... | ..... |
| 10-14 | .09 | .65 | 5.27 | .52 | .83 | 1.93 | 1.47 | 1.47 | 1.47 | ..... | .74 | ..... | .48 | 4.51 | .77 | 2.49 | 1.12 | ..... |
| 15-19 | .46 | .56 | 5.24 | 1.14 | 4.68 | 1.77 | .73 | .73 | .73 | ..... | .37 | 1.04 | 1.30 | 4.09 | .65 | 1.05 | 1.12 | ..... |
| 20-24 | .46 | 1.46 | 5.66 | 6.66 | 3.83 | 4.01 | .80 | .80 | .80 | ..... | .21 | .47 | 1.53 | 1.23 | 1.74 | 2.04 | 4.11 | ..... |
| 25-34 | 5.66 | 9.94 | 15.00 | 15.00 | 12.52 | 21.42 | .61 | 2.41 | .24 | 2.41 | .23 | 10.31 | 1.34 | 3.77 | 3.25 | .76 | .70 | ..... |
| 35-44 | 47.06 | 1.66 | 33.93 | 33.93 | 38.92 | 34.12 | .66 | 8.01 | .28 | 31.42 | .28 | 31.42 | 9.96 | 27.39 | 13.37 | 14.49 | .65 | .45 |
| 45-54 | 155.30 | 2.36 | 4.08 | 87.47 | 288.11 | 89.64 | 1.76 | 1.76 | 1.76 | 11.29 | ..... | 106.17 | 58.62 | 173.26 | 51.31 | 15.76 | .19 | .10 |
| 55-64 | 341.86 | 4.08 | 2.40 | 214.38 | 1.13 | 1.13 | 1.49 | 1.49 | 1.49 | ..... | .45 | 272.28 | 2.25 | 164.41 | 44.55 | .55 | .46 | .41 |
| 65-74 | 534.26 | 4.44 | 699.10 | 2,446.81 | 509.28 | 5.08 | 8.24 | 8.24 | 8.24 | ..... | .45 | 577.37 | 3.91 | 598.59 | 2,305.02 | 2.26 | 3.38 | 3.35 |
| 75 and over | 844.14 | 4.44 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

See footnotes at end of table.

Appendix Table 2. Mortality from 8 specific forms of heart disease by sex, age, urbanization, and geographic section of the United States: white resident mortality per 100,000 population in 1940—Continued

| Age | Male | | | | | | Female | | | | | |
|---|-----------------------------------|--------------------|--|----------------------------|-----------------------------|--------------------------|-----------------------------------|--------------------|--|----------------------------|-----------------------------|--------------------------|
| | Diseases of the coronary arteries | Acute endocarditis | Chronic affections of the valves and endocardium | Diseases of the myocardium | Other diseases of the heart | Syphilitic heart disease | Diseases of the coronary arteries | Acute endocarditis | Chronic affections of the valves and endocardium | Diseases of the myocardium | Other diseases of the heart | Syphilitic heart disease |
| URBAN SOUTH ² —CITIES AND TOWNS OF 2,500 AND OVER POPULATION | | | | | | | | | | | | |
| All ages----- | 151.20 | 2.13 | 38.97 | 171.78 | 30.61 | 1.34 | 5.63 | 6.48 | 52.65 | 1.72 | 30.66 | 120.76 |
| Under 5----- | 38 | 1.13 | 3.02 | 4.90 | 1.88 | * | 75.77 | .78 | .39 | .78 | 1.56 | 5.06 |
| 5-9 | 38 | 2.30 | .38 | 1.63 | 1.92 | ----- | 1.53 | 1.95 | 1.39 | 1.36 | 3.90 | 3.74 |
| 10-14 | 1.02 | ----- | 2.37 | 3.05 | 1.25 | ----- | 1.02 | 4.32 | .86 | 1.16 | 1.15 | 1.15 |
| 15-19 | 1.62 | 8.12 | .94 | 1.25 | 1.18 | ----- | 1.63 | 2.06 | 5.68 | .51 | .77 | .77 |
| 20-24 | 31 | 2.35 | 2.64 | 5.59 | 1.58 | ----- | .69 | 2.61 | 4.33 | 3.07 | .18 | .84 |
| 25-34 | 1.47 | 8.81 | 4.22 | 4.52 | 1.75 | ----- | .45 | 1.95 | 17.24 | 15.82 | 5.86 | .18 |
| 35-44 | 8.74 | .60 | 7.06 | 13.52 | 1.75 | ----- | 3.76 | 13.68 | 40.43 | 20.48 | 66.62 | 1.15 |
| 45-54 | 75.32 | 3.01 | 19.53 | 28.17 | 12.79 | ----- | 1.24 | 13.92 | 2.07 | 31.09 | 34.88 | .33 |
| 55-64 | 233.41 | 3.36 | 36.24 | 127.91 | 36.72 | ----- | .48 | 1.21 | 1.64 | 58.46 | 1.07 | .23 |
| 65-74 | 533.96 | 7.05 | 91.22 | 426.80 | 84.17 | ----- | 1.11 | 23.36 | 144.83 | 1.07 | 1.15 | .23 |
| 75 and over-- | 828.03 | 4.06 | 217.83 | 1,087.96 | 171.15 | ----- | .68 | 24.35 | 3.25 | 152.88 | 88.37 | .23 |
| All ages----- | 1,363.10 | 3.87 | 524.73 | 3,189.02 | 387.25 | 1.94 | 15.49 | 1.35 | 372.99 | 5.36 | 1.63 | 5.42 |
| Under 5----- | 40 | .13 | 41.78 | 97.56 | 37.04 | 1.26 | 1.65 | 4.22 | 29.38 | 0.90 | 33.96 | 24.93 |
| 5-9 | 13 | ----- | 2.42 | .54 | 1.34 | 67 | 1.72 | 1.27 | 46.63 | ----- | 1.11 | 2.22 |
| 10-14 | 13 | .51 | 3.44 | .93 | 1.72 | ----- | 1.15 | 2.22 | 1.06 | 4.41 | .42 | .42 |
| 15-19 | 52 | .52 | 4.71 | .25 | 1.15 | ----- | 1.56 | 1.56 | .64 | 1.41 | .94 | .88 |
| 20-24 | 92 | .52 | 4.04 | .78 | 2.22 | ----- | 1.80 | 1.61 | .52 | .55 | .82 | .82 |
| 25-34 | 97 | .97 | 2.41 | 1.29 | .80 | ----- | .64 | 1.61 | 1.86 | 1.52 | 1.09 | .51 |
| 35-44 | 3.68 | 1.16 | 6.39 | 3.39 | 3.87 | ----- | .49 | 1.48 | 2.88 | 5.37 | 3.05 | .50 |
| 45-54 | 23.80 | 1.76 | 11.97 | 16.89 | 1.51 | ----- | .51 | 1.51 | 7.86 | 13.54 | 7.22 | .13 |
| 55-64 | 92.81 | 1.71 | 32.44 | 52.44 | 9.4 | 4.19 | 1.17 | 24.94 | 28.60 | 40.31 | 17.68 | .33 |
| 65-74 | 230.75 | 2.36 | 85.29 | 207.71 | 92.81 | 2.15 | 3.06 | 1.36 | 2.81 | 178.63 | 51.72 | .70 |
| 75 and over-- | 386.51 | 3.06 | 249.39 | 580.11 | 235.74 | 9.53 | 4.72 | 6.60 | 4.72 | 1,93 | 150.25 | .70 |
| All ages----- | 620.58 | 4.72 | 739.42 | 2,085.28 | 588.71 | 6.60 | ----- | 430.55 | 2.87 | 458.29 | 8.61 | 2.87 |
| Under 5----- | 40 | ----- | 2.42 | .54 | 1.34 | 67 | 1.72 | 1.27 | 46.63 | ----- | 1.11 | 2.22 |
| 5-9 | 13 | ----- | 3.44 | .93 | 1.72 | ----- | 1.15 | 2.22 | 1.06 | 4.41 | .42 | .42 |
| 10-14 | 13 | .51 | 4.71 | .25 | 1.15 | ----- | 1.56 | 1.56 | .64 | 1.41 | .94 | .88 |
| 15-19 | 52 | .52 | 4.04 | .78 | 2.22 | ----- | 1.80 | 1.61 | .52 | .55 | .82 | .82 |
| 20-24 | 92 | .97 | 2.41 | 1.29 | .80 | ----- | .64 | 1.61 | 1.86 | 1.52 | 1.09 | .51 |
| 25-34 | 97 | .97 | 2.41 | 1.29 | .80 | ----- | .64 | 1.61 | 1.86 | 1.52 | 1.09 | .51 |
| 35-44 | 3.68 | 1.16 | 6.39 | 3.39 | 3.87 | ----- | .49 | 1.48 | 2.88 | 5.37 | 3.05 | .50 |
| 45-54 | 23.80 | 1.76 | 11.97 | 16.89 | 1.51 | ----- | .51 | 1.51 | 7.86 | 13.54 | 7.22 | .13 |
| 55-64 | 92.81 | 1.71 | 32.44 | 52.44 | 9.4 | 4.19 | 1.17 | 24.94 | 28.60 | 40.31 | 17.68 | .33 |
| 65-74 | 230.75 | 2.36 | 85.29 | 207.71 | 92.81 | 2.15 | 3.06 | 1.36 | 2.81 | 178.63 | 51.72 | .70 |
| 75 and over-- | 386.51 | 3.06 | 249.39 | 580.11 | 235.74 | 9.53 | 4.72 | 6.60 | 4.72 | 1,93 | 150.25 | .70 |
| All ages----- | 620.58 | 4.72 | 739.42 | 2,085.28 | 588.71 | 6.60 | ----- | 430.55 | 2.87 | 458.29 | 8.61 | 2.87 |
| RURAL SOUTH ² —TOWNS OF LESS THAN 2,500 POPULATION AND RURAL AREAS | | | | | | | | | | | | |
| All ages----- | 65.33 | 1.11 | 41.78 | 97.56 | 37.04 | 1.26 | 1.65 | 4.22 | 29.38 | 0.90 | 33.96 | 24.93 |
| Under 5----- | 40 | .13 | 2.42 | .54 | 1.34 | 67 | 1.72 | 1.27 | 46.63 | ----- | 1.11 | 2.22 |
| 5-9 | 13 | ----- | 3.44 | .93 | 1.72 | ----- | 1.15 | 2.22 | 1.06 | 4.41 | .42 | .42 |
| 10-14 | 13 | .51 | 4.71 | .25 | 1.15 | ----- | 1.56 | 1.56 | .64 | 1.41 | .94 | .88 |
| 15-19 | 52 | .52 | 4.04 | .78 | 2.22 | ----- | 1.80 | 1.61 | .52 | .55 | .82 | .82 |
| 20-24 | 92 | .97 | 2.41 | 1.29 | .80 | ----- | .64 | 1.61 | 1.86 | 1.52 | 1.09 | .51 |
| 25-34 | 97 | .97 | 2.41 | 1.29 | .80 | ----- | .64 | 1.61 | 1.86 | 1.52 | 1.09 | .51 |
| 35-44 | 3.68 | 1.16 | 6.39 | 3.39 | 3.87 | ----- | .49 | 1.48 | 2.88 | 5.37 | 3.05 | .50 |
| 45-54 | 23.80 | 1.76 | 11.97 | 16.89 | 1.51 | ----- | .51 | 1.51 | 7.86 | 13.54 | 7.22 | .13 |
| 55-64 | 92.81 | 1.71 | 32.44 | 52.44 | 9.4 | 4.19 | 1.17 | 24.94 | 28.60 | 40.31 | 17.68 | .33 |
| 65-74 | 230.75 | 2.36 | 85.29 | 207.71 | 92.81 | 2.15 | 3.06 | 1.36 | 2.81 | 178.63 | 51.72 | .70 |
| 75 and over-- | 386.51 | 3.06 | 249.39 | 580.11 | 235.74 | 9.53 | 4.72 | 6.60 | 4.72 | 1,93 | 150.25 | .70 |
| All ages----- | 620.58 | 4.72 | 739.42 | 2,085.28 | 588.71 | 6.60 | ----- | 430.55 | 2.87 | 458.29 | 8.61 | 2.87 |

• North: New England, Middle Atlantic, and East North Central regions.

New *Salmonella* Type: *Salmonella duval*

By P. R. EDWARDS and MARY G. WEST*

Salmonella duval is represented by two cultures, both of which were isolated from rectal swabs taken from two normal dogs during the course of a survey to determine the incidence of *Salmonella* carriers among dogs in Florida. The cultures were isolated by Mrs. Mildred M. Galton who recognized them as unusual *Salmonella* types and forwarded them for identification.

The cultures were typical members of the genus *Salmonella*. They were motile rods which produced hydrogen sulfide and utilized citrate and d-tartrate but failed to produce indol, to hydrolyze urea, or to liquefy gelatin. Acid and gas were produced from glucose, arabinose, maltose, mannitol, and sorbitol. Lactose, sucrose, raffinose, dulcitol, inositol, adonitol, and salicin were not attacked.

The O antigens of the organisms were closely related to those of *Salmonella riogrande* (XL). Antigen I was present in the cultures and was subject to form variation, as it is in many *Salmonella* types.¹ In absorption tests the organisms removed all agglutinins from O serums prepared from *S. riogrande* (XL) and from *Salmonella allandale* (I, XL).

The H antigens of the organisms were diphasic and phase 1 was flocculated to the titer of serum derived from phase 1 of *Salmonella paratyphi B* (b). In absorption tests *S. duval* reduced the titer of the serum from 10,000 to 100. Phase 1 of *S. duval* may be denoted by the symbol b. Phase 2 of *S. duval* was agglutinated in high dilution by e, n, x and e, n, z_{15} serums. When tested with absorbed serums for factors x and z_{15} it was agglutinated only by the latter. In absorption tests phase 2 of *S. duval* removed all agglutinins from serum derived from phase 2 of *Salmonella glostrup* (e, n, z_{15}). The antigenic formula of *S. duval* is I, XL:b-e, n, z_{15} .

Summary

A new *Salmonella* type, *Salmonella duval*, having the antigenic formula I, XL:b-e, n, z_{15} is described. It is represented by two cultures both of which were isolated from the intestinal tracts of normal dogs.

*Bacteriologists from the Laboratory Services, Communicable Disease Center, Atlanta, Ga.

¹ Kauffmann, F.: Proc. 3d Internat. Cong. Microbiol. 1940, pp. 628-629.

INCIDENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED JUNE 10, 1950

Poliomyelitis

Reported cases of poliomyelitis in the United States increased from 132 last week to 206 for the current week. For the corresponding weeks of last year, 156 and 243 cases, respectively, were reported. The largest numbers of cases for the current week were reported by Texas (61), California (18), Missouri (12), and Louisiana (9). For the preceding week the largest number of cases were reported by Texas (55), California (18), Oklahoma (12), and Florida (7).

The cumulative total number of poliomyelitis cases for the calendar year is misleading because the calendar year does not correspond with the "disease" year. A calendar year covers January through December, while the "disease" year for poliomyelitis covers March through February. Therefore, the 1950 calendar year includes the

Comparative Data for Cases of Specified Reportable Diseases: United States

[Numbers after diseases are International List numbers, 1948 revision]

| Disease | Total for week ended | | 5-year median 1945-49 | Seasonal low week | Cumulative total since seasonal low week | | 5-year median 1944-45 through 1948-49 | Cumulative total for calendar year | | 5-year median 1945-49 |
|---|----------------------|------------------|--------------------------|-------------------|--|---------|---|------------------------------------|---------|--------------------------|
| | June 10, 1950 | June 11, 1949 | | | 1949-50 | 1948-49 | | 1950 | 1949 | |
| | | | | | | | | | | |
| Anthrax (062) | 1 | 2 | (1) | (1) | (1) | (1) | (1) | 19 | 28 | (1) |
| Diphtheria (055) | 69 | 109 | 152 | 27th | 7,157 | 8,554 | 13,275 | 2,886 | 3,440 | 5,709 |
| Acute infectious encephalitis (082) | 12 | 16 | 7 | (1) | (1) | (1) | (1) | 205 | 233 | 200 |
| Influenza (480-483) | 1,015 | 896 | 691 | 30th | 272,613 | 108,810 | 178,126 | 242,083 | 72,540 | 134,568 |
| Measles (085) | 14,273 | 16,813 | 16,813 | 35th | 253,699 | 588,507 | 503,970 | 234,569 | 536,114 | 469,024 |
| Meningococcal meningitis (057.0) | 75 | 59 | 60 | 37th | 2,973 | 2,685 | 2,914 | 2,060 | 1,814 | 1,942 |
| Pneumonia (490-493) | 1,513 | 1,045 | ----- | (1) | (1) | (1) | ----- | 52,245 | 47,152 | ----- |
| Acute poliomyelitis (080) | 206 | 243 | 160 | 11th | 1,087 | 1,103 | 725 | 2,221 | 2,018 | 1,192 |
| Rocky Mountain spotted fever (104) | 23 | 27 | 22 | (1) | (1) | (1) | (1) | 100 | 155 | 105 |
| Scarlet fever (050) | 946 | 1,075 | 1,555 | 32d | 52,909 | 76,624 | 82,426 | 36,470 | 54,080 | 55,740 |
| Smallpox (084) | 1 | 1 | 2 | 35th | 43 | 50 | 100 | 23 | 40 | 136 |
| Tularemia (050) | 12 | 33 | 28 | (1) | (1) | (1) | (1) | 446 | 563 | 446 |
| Typhoid and paratyphoid fever (040, 041) ¹ | 65 | 89 | 80 | 11th | 669 | 641 | 728 | 1,179 | 1,129 | 1,201 |
| Whooping cough (056) | 3,150 | 1,216 | 1,886 | 39th | 83,036 | 33,725 | 72,605 | 61,500 | 23,692 | 46,239 |

¹ Not computed.

² Including cases reported as salmonellosis.

declining phase of last year's high incidence. On this basis, the total for the current "disease" year is slightly less than the corresponding total for last year, 1,087 cases as compared with 1,103. Corresponding cumulative totals by State show Texas with 375 cases which may be compared with 358 last year, and California with 163 cases which may be compared with 116 cases last year.

Other Diseases

The total number of cases of influenza reported was 1,015 as compared with 1,590 last week and 896 for the corresponding period last year. The 5-year (1945-49) median was 691. States reporting the largest number of influenza cases for the week were Texas (437), Virginia (199), and Arizona (96).

Incidence of whooping cough reported increased from 2,484 cases last week to 3,150 for the current week. For the corresponding period last year, 1,216 cases were reported. The 5-year median was 1,886.

One case of anthrax was reported in New Jersey, and one case of smallpox was reported in Kansas. Reported cases of infectious encephalitis numbered 12 for the week as compared with 9 for the preceding week, 16 for the corresponding week last year, and 7 for the 5-year median.

DEATHS DURING WEEK ENDED JUNE 10, 1950

| | Week ended June 10, 1950 | Corresponding week, 1949 |
|--|-----------------------------|-----------------------------|
| Data for 93 large cities of the United States: | | |
| Total deaths | 9,117 | 8,993 |
| Median for 3 prior years | 8,922 | |
| Total deaths, first 23 weeks of year | 221,635 | 210,235 |
| Deaths under 1 year of age | 652 | 590 |
| Median for 3 prior years | 610 | |
| Deaths under 1 year of age, first 23 weeks of year | 14,254 | 14,884 |
| Deaths from industrial insurance companies: | | |
| Policies in force | 60,689,748 | 70,406,105 |
| Number of death claims | 12,805 | 12,470 |
| Death claims per 1,000 policies in force, annual rate | 9.6 | 9.2 |
| Death claims per 1,000 policies, first 23 weeks of year, annual rate | 9.9 | 9.6 |

Reported Cases of Selected Communicable Diseases: United States, Week Ended June 10, 1950

[Numbers under diseases are International List Numbers, 1948 revision]

| Area | Diph- (055) | Enceph- alitis, in- fectious (082) | Influ- enza (480-483) | Measles (085) | Menin- gitis, menin- gococcal (057.0) | Pneu- monia (490-493) | Pollo- myelitis (080) |
|---------------------------|----------------|---|-----------------------------|------------------|--|-----------------------------|-----------------------------|
| United States | 69 | 12 | 1,015 | 14,273 | 75 | 1,513 | 206 |
| New England | 3 | | 6 | 1,816 | 1 | 75 | 1 |
| Maine | | | 6 | 16 | | 34 | |
| New Hampshire | | | | 24 | | 1 | |
| Vermont | | | | 7 | | | |
| Massachusetts | 3 | | | 1,179 | | | |
| Rhode Island | | | | 12 | 1 | 1 | |
| Connecticut | | | | 578 | | 39 | 1 |
| Middle Atlantic | 7 | 4 | 2 | 4,749 | 16 | 332 | 10 |
| New York | 4 | 3 | 1 | 1,622 | 8 | 188 | 6 |
| New Jersey | 3 | 1 | 1 | 1,987 | 4 | 52 | 2 |
| Pennsylvania | | | | 1,140 | 4 | 92 | 2 |
| East North Central | 5 | 3 | 20 | 4,341 | 15 | 163 | 24 |
| Ohio | 2 | | 4 | 762 | 6 | 41 | 4 |
| Indiana | 1 | | 1 | 358 | 1 | 8 | |
| Illinois | 1 | | | 1,155 | 3 | 68 | 6 |
| Michigan | | | 2 | 1,037 | 2 | 37 | 6 |
| Wisconsin | 1 | | | 1,029 | 3 | 8 | 8 |
| West North Central | 4 | 2 | 17 | 670 | 4 | 149 | 34 |
| Minnesota | 1 | 1 | 2 | 271 | 1 | 13 | 5 |
| Iowa | | | | 126 | 2 | | 7 |
| Missouri | 1 | | | 36 | | 13 | 12 |
| North Dakota | 1 | 1 | 9 | 3 | | 107 | |
| South Dakota | | | | 31 | | 1 | |
| Nebraska | | | | 4 | | | 7 |
| Kansas | 1 | | | 76 | 1 | 15 | 3 |
| South Atlantic | 15 | 1 | 320 | 607 | 16 | 397 | 16 |
| Delaware | | | | 11 | | | |
| Maryland | 1 | | | 60 | 2 | 53 | 1 |
| District of Columbia | | | | 50 | 1 | 26 | |
| Virginia | 4 | | | 199 | 5 | 30 | |
| West Virginia | 1 | | | 151 | | 6 | 1 |
| North Carolina | 6 | | | 82 | | | 3 |
| South Carolina | 1 | | | 30 | 1 | 7 | 6 |
| Georgia | 2 | 1 | 82 | 17 | 4 | 266 | |
| Florida | | | | 87 | 3 | 9 | 5 |
| East South Central | 11 | 1 | 19 | 226 | 8 | 67 | 13 |
| Kentucky | 2 | | | 109 | 5 | 21 | 1 |
| Tennessee | 6 | 1 | 9 | 56 | 1 | | 2 |
| Alabama | 2 | | | 30 | 1 | 26 | 3 |
| Mississippi | 1 | | | 31 | 1 | 20 | 7 |
| West South Central | 18 | 1 | 472 | 538 | 10 | 244 | 80 |
| Arkansas | 2 | | | 89 | | 15 | 6 |
| Louisiana | 2 | | 3 | 14 | 4 | 19 | 9 |
| Oklahoma | | | | 24 | 2 | 19 | 4 |
| Texas | 14 | 1 | 437 | 423 | 4 | 191 | 61 |
| Mountain | | | 146 | 479 | 1 | 35 | 5 |
| Montana | | | 13 | 28 | | | 1 |
| Idaho | | | 28 | 113 | | | 2 |
| Wyoming | | | | 15 | | 1 | |
| Colorado | | | 9 | 83 | | 11 | 1 |
| New Mexico | | | | 42 | | 6 | 1 |
| Arizona | | | 96 | 58 | | 15 | |
| Utah | | | | 140 | 1 | 2 | |
| Nevada | | | | | | | |
| Pacific | 6 | | 13 | 847 | 4 | 32 | 23 |
| Washington | | | 1 | 105 | | | 1 |
| Oregon | | | 9 | 16 | | 19 | 4 |
| California | 6 | | 3 | 726 | 4 | 33 | 18 |
| Alaska | | | | | | | |
| Hawaii | | | 1 | 4 | | | |

¹ New York City only.
Anthrax: New Jersey, 1 case.

Reported Cases of Selected Communicable Diseases: United States, Week Ended June 10, 1950—Continued

[Numbers under diseases are International List Numbers, 1948 revision]

| Area | Rocky Mountain spotted fever (104) | Scarlet fever (050) | Small-pox (084) | Tularemia (059) | Typhoid and para-typhoid fever ¹ (040, 041) | Whooping cough (056) | Rabies in animals |
|---------------------------|---------------------------------------|------------------------|--------------------|--------------------|---|-------------------------|-------------------|
| United States | 23 | 946 | 1 | 12 | 65 | 3,150 | 157 |
| New England | | 184 | | | 2 | 406 | |
| Maine | 7 | | | | | 31 | |
| New Hampshire | 5 | | | | | 10 | |
| Vermont | 2 | | | | | 21 | |
| Massachusetts | 139 | | | | 1 | 167 | |
| Rhode Island | 6 | | | | | 67 | |
| Connecticut | 25 | | | | 1 | 110 | |
| Middle Atlantic | 1 | 243 | | | 7 | 384 | 17 |
| New York | 2 | 134 | | | 5 | 112 | 13 |
| New Jersey | 1 | 32 | | | 2 | 151 | |
| Pennsylvania | | 77 | | | | 121 | 4 |
| East North Central | | 248 | | 1 | 8 | 502 | 47 |
| Ohio | | 89 | | | 2 | 151 | 4 |
| Indiana | | 8 | | | 3 | 36 | 34 |
| Illinois | | 24 | | | 3 | 61 | 5 |
| Michigan | | 92 | | 1 | | 159 | 4 |
| Wisconsin | | 35 | | | | 95 | |
| West North Central | | 48 | 1 | | 1 | 155 | 14 |
| Minnesota | | 6 | | | | 26 | |
| Iowa | | 6 | | | 1 | 16 | 8 |
| Missouri | | 9 | | | | 55 | |
| North Dakota | | 2 | | | | 7 | |
| South Dakota | | | | | | 12 | |
| Nebraska | | 15 | | | | 3 | |
| Kansas | | 10 | 1 | | | 36 | 6 |
| South Atlantic | 16 | 39 | | | 5 | 323 | 24 |
| Delaware | | | | | | 7 | |
| Maryland | 5 | 13 | | | 1 | 42 | |
| District of Columbia | | | | | | 2 | |
| Virginia | 5 | 9 | | | | 84 | 4 |
| West Virginia | 2 | 2 | | | 2 | 46 | 6 |
| North Carolina | 3 | 9 | | | 1 | 86 | |
| South Carolina | | | | | | 26 | 4 |
| Georgia | 1 | 5 | | | 1 | 23 | 10 |
| Florida | | 1 | | | | 7 | |
| East South Central | 4 | 24 | | 2 | 5 | 623 | 28 |
| Kentucky | | 11 | | | | 509 | 12 |
| Tennessee | 4 | 8 | | | | 57 | 7 |
| Alabama | | 5 | | | 2 | 53 | 7 |
| Mississippi | | | | 2 | 3 | 4 | 2 |
| West South Central | | 21 | | 6 | 16 | 393 | 17 |
| Arkansas | | 2 | | 5 | 1 | 93 | 1 |
| Louisiana | | 3 | | | 5 | 4 | 1 |
| Oklahoma | | 5 | | | 1 | 21 | 2 |
| Texas | | 11 | | 1 | 9 | 275 | 13 |
| Mountain | 2 | 23 | | 3 | 3 | 120 | |
| Montana | | 5 | | 1 | | 10 | |
| Idaho | | 2 | | | | 12 | |
| Wyoming | 1 | | | | | 4 | |
| Colorado | 1 | 4 | | | | 32 | |
| New Mexico | | 1 | | | | 11 | |
| Arizona | | 8 | | | 3 | 38 | |
| Utah | | 3 | | 2 | | 13 | |
| Nevada | | | | | | | |
| Pacific | | 116 | | | 18 | 244 | 10 |
| Washington | | 16 | | | | 41 | |
| Oregon | | 4 | | | | 49 | |
| California | | 96 | | | 18 | 154 | 10 |
| Alaska | | | | | | 2 | |
| Hawaii | | 1 | | | | | |

¹ Including cases reported as salmonellosis.

² Including cases reported as streptococcal sore throat.

³ Report for 3 weeks.

FOREIGN REPORTS

CANADA

Provinces—Notifiable diseases—Week ended May 27, 1950.—Cases of certain notifiable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

| Disease | Newfoundland | Prince Edward Island | Nova Scotia | New Brunswick | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Total |
|--------------------------------|--------------|----------------------|-------------|---------------|--------|---------|----------|--------------|---------|------------------|-------|
| Brucellosis | | | | | | | | | | | 4 |
| Chickenpox | 1 | | 18 | 1 | 165 | 249 | 31 | 10 | 66 | 111 | 652 |
| Diphtheria | | | | | 3 | | | | | | 3 |
| Dysentery, bacillary | | | | | 7 | | | 1 | | 1 | 10 |
| German measles | | | 38 | | 18 | 1,304 | 2 | 122 | 66 | 388 | 1,938 |
| Influenza | | | 19 | | | 5 | 1 | | | | 25 |
| Measles | | | 11 | 51 | 561 | 527 | 11 | 16 | 20 | 230 | 1,427 |
| Meningitis, meningo-coccal | | | | 1 | | 1 | 2 | | | | 4 |
| Mumps | | | | 35 | 4 | 233 | 380 | 8 | 64 | 118 | 1,006 |
| Poliomyelitis | | | | | | | | | | 1 | 1 |
| Scarlet fever | 5 | | 3 | | 55 | 35 | 2 | 4 | 31 | 11 | 146 |
| Tuberculosis (all forms) | 9 | | 4 | 6 | 103 | 16 | 3 | 15 | 68 | 27 | 251 |
| Typhoid and para-typhoid fever | | | | | 1 | 7 | 1 | 1 | | | 4 |
| Venereal diseases: | | | | | | | | | | | |
| Gonorrhea | 10 | | 18 | 4 | 62 | 41 | (2) | | 12 | 29 | 212 |
| Syphilis | 8 | | 10 | 7 | 58 | 19 | (2) | | 3 | 1 | 116 |
| Whooping cough | | | 2 | | 94 | 62 | | | 1 | 4 | 75 |

¹ Type not segregated.

² Report not received.

CUBA

Habana—Notifiable diseases—5 weeks ended April 29, 1950.—Cases and deaths of certain notifiable diseases were reported in Habana, Cuba, as follows:

| Disease | Cases | Deaths | Disease | Cases | Deaths |
|------------|-------|--------|---------------|-------|--------|
| Chickenpox | 29 | | Poliomyelitis | | |
| Diphtheria | 15 | 1 | Tuberculosis | 3 | 1 |
| Measles | 2 | | Typhoid fever | 4 | |

Provinces—Notifiable diseases—5 weeks ended April 29, 1950.—Cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

| Disease | Pinar del Rio | Habana ¹ | Matanzas | Santa Clara | Camaguey | Oriente | Total |
|----------------|---------------|---------------------|----------|-------------|----------|---------|-------|
| Cancer | 6 | 18 | 13 | 28 | 2 | 25 | 92 |
| Chickenpox | 1 | 36 | 13 | 131 | 22 | 13 | 216 |
| Diphtheria | 1 | 17 | | 2 | 2 | 1 | 23 |
| Leprosy | | 8 | | 1 | 1 | 2 | 12 |
| Malaria | | | | | | 22 | 22 |
| Measles | | 6 | | | 2 | 14 | 22 |
| Poliomyelitis | 2 | 1 | 1 | 1 | 1 | | 6 |
| Tuberculosis | 3 | 24 | 18 | 9 | 14 | 21 | 89 |
| Typhoid fever | 2 | 11 | 4 | 6 | 7 | 17 | 47 |
| Whooping cough | | 10 | | 23 | 1 | | 34 |

¹ Includes the city of Habana.

JAMAICA

Notifiable diseases—4 weeks ended May 27, 1950.—Cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

| Disease | Kingston | Other localities | Disease | Kingston | Other localities |
|-----------------------------|----------|------------------|-------------------------------|----------|------------------|
| Chickenpox..... | 29 | 44 | Scarlet fever..... | 1 | 1 |
| Diphtheria..... | 1 | 1 | Tuberculosis (pulmonary)..... | 45 | 50 |
| Dysentery, unspecified..... | 1 | 1 | Typhoid fever..... | 7 | 33 |
| Erysipelas..... | 1 | 1 | Typhus fever (murine)..... | 4 | — |
| Leprosy..... | 1 | 1 | | | |

WORLD DISTRIBUTION OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From consular reports, international health organizations, medical officers of the Public Health Service, and other sources. The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

Since many of the figures in the following tables are from weekly reports, the accumulated totals are for approximate dates.

CHOLERA (Cases)

| Place | January-March 1950 | April 1950 | May 1950—week ended— | | | |
|----------------------------------|--------------------|------------|----------------------|-------|------|-----|
| | | | 6 | 13 | 20 | 27 |
| ASIA | | | | | | |
| Burma..... | 6 | 2 | 1 | — | — | 1 |
| Akyab..... | — | — | — | — | — | 1 |
| Bassein..... | — | 1 | — | — | — | — |
| Maubin..... | 2 | — | — | — | — | — |
| Rangoon..... | 1 | — | — | — | — | — |
| India..... | 28,216 | 16,541 | 2,638 | 491 | 431 | 308 |
| Ahmedabad..... | — | — | — | — | — | — |
| Allahabad..... | — | — | — | — | 3 | — |
| Bombay..... | — | — | 11 | — | 3 | — |
| Calcutta..... | 2,855 | 2,942 | 492 | 490 | 422 | 308 |
| Cawnpore..... | — | — | — | 1 | — | — |
| Cocanada..... | 2 | — | — | — | — | — |
| Cuddalore..... | 26 | 5 | — | — | — | — |
| Lucknow..... | — | — | — | — | 3 | — |
| Madras..... | 11 | — | — | — | — | — |
| Masulipatam..... | 46 | — | — | — | — | — |
| Negapatam..... | 67 | — | — | — | — | — |
| Port Blair (Andaman Island)..... | — | 12 | — | — | — | — |
| Tellicherry..... | 27 | — | — | — | — | — |
| Tuticorin..... | 25 | — | — | — | — | — |
| Indochina..... | 6 | — | — | — | 1 | — |
| Cambodia..... | 5 | — | — | — | — | — |
| Cochinchina..... | 1 | — | — | — | 1 | — |
| Giaodinh..... | — | — | — | — | 1 | — |
| Rachgia..... | 1 | — | — | — | — | — |
| Pakistan..... | 6,636 | 8,540 | 3,1,414 | 3,246 | 3,98 | — |
| Chittagong..... | 25 | 28 | 5 | 9 | 29 | 29 |
| Dacca..... | 19 | 134 | 4 | 7 | — | — |

¹ Imported.

² Includes imported cases.

³ Preliminary figures.

PLAUE

(Cases; P=present)

| Place | January-March 1950 | April 1950 | May 1950—week ended— | | | |
|--------------------------|--------------------|------------|----------------------|-----|----|----|
| | | | 6 | 13 | 20 | 27 |
| AFRICA | | | | | | |
| Belgian Congo | 3 | 1 | 1 | | | 2 |
| Costermansville Province | 2 | | 1 | | | 1 |
| Stanleyville Province | 1 | 1 | | | | 1 |
| Madagascar | 34 | 7 | | 11 | | |
| Rhodesia, Northern | 2 | | | | 1 | |
| Union of South Africa | 4 | 4 | | | 1 | |
| Orange Free State | 2 | 4 | | | 1 | |
| ASIA | | | | | | |
| Burma | 2 177 | 27 | 1 | 2 | 1 | |
| Bassein | | 1 | | | | |
| Bhamo | 3 2 | | | | | |
| Henzada | 11 | 1 | | | | |
| Kyauklat | 32 | 2 | | | | |
| Moulmein | | | 3 1 | | | |
| Myaungmya | 2 | 3 | | | | |
| Myingyan | 2 | | | | | |
| Pegu | | 1 | | | | |
| Rangoon | | 2 2 | 1 | 3 1 | 1 | |
| Yenangyaung | 38 | | | | | |
| China: | | | | | | |
| Chekiang Province | 10 | | | | | |
| Wenchow | 4 | | | | | |
| Fukien Province | 126 | | | | | |
| Kwangsi Province | 4 63 | | | | | |
| Kwangtung Province | 15 | | | | | |
| India | 29,082 | 6,506 | 3 192 | 2 | 2 | 1 |
| Allahabad | 3 1 | 3 13 | 3 3 | 3 1 | | |
| Bombay | | 2 | 3 1 | 1 | 1 | |
| Calcutta | 3 1 | | | | 1 | 1 |
| Cawnpore | 9 | 9 | | | | |
| Lucknow | 5 | 3 | 3 1 | | | |
| Indochina (French): | | | | | | |
| Annam | 30 | 12 | 5 | 6 | 5 | |
| Cambodia | 9 | | 2 | 5 | | |
| Cochinchina | | | | | | |
| Laos | 2 | | | | | |
| Indonesia: | | | | | | |
| Java | 258 | 35 | 11 | 7 | 2 | |
| Bandoeng | 2 | | | | | |
| Jogjakarta | 256 | 35 | 11 | 7 | 2 | |
| Pakistan | 3 1 | | | | | |
| Karachi | 3 1 | | | | | |
| Thailand (Siam) | 51 | 1 | | | | |
| SOUTH AMERICA | | | | | | |
| Ecuador | 10 | | | | | |
| El Oro Province | 4 | | | | | |
| Loja Province | 6 | | | | | |
| Peru | 5 | | | | | |
| Piura Department | 5 | | | | | |
| Venezuela | | 5 | | | | |
| Miranda State | | 5 | | | | |

¹ May, 10, 1950. ² Includes imported cases. ³ Imported. ⁴ Deaths. ⁵ Preliminary figures.

⁶ Includes suspected cases.

SMALLPOX

(Cases; P=present)

| AFRICA | | | | | | |
|----------------------|-----|-----|-----|-----|---|--|
| Algeria | 30 | 13 | | | | |
| Angola | 80 | | | | | |
| Bechuanaland | 5 | | | | | |
| Belgian Congo | 628 | 339 | 110 | 115 | | |
| British East Africa: | | | | | | |
| Kenya | 5 | 1 | | | | |
| Nyasaland | 203 | 23 | | | | |
| Tanganyika | 197 | 45 | 11 | 12 | | |
| Uganda | 1 | | | | | |
| Cameroon (British) | 232 | | | | | |
| Cameroon (French) | 19 | 15 | | | | |
| Dahomey | 172 | 10 | | 7 | 8 | |

See footnotes at end of table.

SMALLPOX—Continued

| Place | January— March 1950 | April 1950 | May 1950—week ended— | | | |
|---------------------------------|------------------------|------------|----------------------|-----|------|------|
| | | | 6 | 13 | 20 | 27 |
| AFRICA—continued | | | | | | |
| Egypt | 43 | 1 | | | | |
| Eritrea | 1 | | | | | |
| Ethiopia | 7 | | | | | |
| French Equatorial Africa | 362 | 41 | | | | |
| French Guinea | 2 | 2 | | | | |
| French West Africa: Haute Volta | 119 | 8 | | | | |
| Gambia | 4 | | | | | |
| Gold Coast | 6 | 56 | | | | |
| Ivory Coast | 365 | 79 | 45 | | | |
| Libya | 2 | | | | | |
| Mauritania | 1 | | | | | |
| Morocco (French) | 5 | | | | | |
| Mozambique | 63 | 26 | | | | |
| Nigeria | 6,677 | 1,756 | 836 | | | |
| Niger Territory | 504 | 131 | | | | |
| Rhodesia: | | | | | | |
| Northern | 3 | 1 | | | | |
| Southern | 246 | | | | | |
| Senegal | 2 | | | | | |
| Sierra Leone | 16 | | | | | |
| Sudan (Anglo-Egyptian) | 27 | 21 | 1 | 2 | 1 | |
| Sudan (French) | 62 | 31 | | | | |
| Togo (French) | 38 | 4 | | | | |
| Tunisia | 1 | | | | | |
| Union of South Africa | 272 | P | | | | |
| ASIA | | | | | | |
| Afghanistan | 151 | | | | | |
| Arabia | 279 | 41 | | | | |
| Bahrein Islands: Bahrein | 11 | 23 | | | | |
| Burma | 4,296 | 502 | 39 | 23 | 17 | 7 |
| China | 457 | 130 | | | | |
| India | 45,535 | 23,150 | 2,722 | 830 | 8319 | 8238 |
| India (Portuguese) | 1 | | | | | |
| Indochina (French) | 242 | 20 | | | | |
| Indonesia: | | | | | | |
| Borneo | | 101 | | | | |
| Java | 440 | 503 | 30 | 20 | 27 | 4 |
| Sumatra | 124 | 54 | 12 | 8 | 8 | |
| Iran | 124 | 21 | | | | |
| Iraq | 72 | 28 | 8 | 2 | 4 | |
| Israel | 15 | | | | | |
| Japan | 3 | 1 | | | | |
| Korea (Southern) | 1,229 | 107 | | | | |
| Lebanon | 111 | | | | | |
| Pakistan | 4,852 | 3,482 | 866 | 842 | 827 | 814 |
| Palestine | 79 | 8 | | | | |
| Syria | 15 | | | | | |
| Thailand (Siam) | 444 | 13 | | | | |
| Transjordan | 19 | | 2 | | | |
| Turkey (See Turkey in Europe) | | | | | | |
| EUROPE | | | | | | |
| Great Britain: | | | | | | |
| England: Liverpool | | 111 | | | | |
| Scotland: Glasgow | | 1221 | | | | |
| Turkey | 11 | 6 | | | | |
| NORTH AMERICA | | | | | | |
| Guatemala | 1 | | | | | |
| Mexico | 73 | 37 | 1 | 17 | | |
| SOUTH AMERICA | | | | | | |
| Argentina | 195 | 104 | 45 | | | |
| Brazil | 18 | 5 | | | | |
| Chile | 13133 | 142,847 | | | | |
| Colombia | 1741 | 1716 | | | | |
| Ecuador | 70 | 5 | | | | |
| Peru | 18303 | | | | | |
| Venezuela | 29 | 13 | | | | |
| OCEANIA | | | | | | |
| Australia: Fremantle | 111 | | | | | |

¹ In Lindi. ² May 1-10, 1950. ³ May 11-20, 1950. ⁴ Includes imported cases. ⁵ Apr. 1-May 5, 1950. ⁶ May 6-15, 1950. ⁷ May 15-25, 1950. ⁸ In Lagos only. ⁹ In ports only. ¹⁰ In Seoul only. ¹¹ Imported. ¹² Reported Mar. 26-Apr. 11, 1950. ¹³ To Apr. 2, 1950. ¹⁴ Apr. 3-May 3, 1950. ¹⁵ May 10-15, 1950. ¹⁶ May 16-22, 1950. ¹⁷ In Medellin. ¹⁸ Jan. 1-31, 1950.

TYPHUS FEVER*

(Cases; P = present)

| Place | January-March 1950 | April 1950 | May 1950—week ended— | | | |
|--------------------------------|--------------------|------------|----------------------|----|----|----|
| | | | | | | |
| | | | 6 | 13 | 20 | 27 |
| AFRICA | | | | | | |
| Algeria | 47 | 16 | | | | |
| Basutoland | 20 | | | | | |
| Belgian Congo | 17 | 22 | 4 | | | |
| British East Africa: Kenya | 4 | 3 | | | | |
| Egypt | 27 | 13 | 3 | 1 | 12 | |
| Eritrea | 8 | | | | 2 | |
| Ethiopia | 184 | | | | | |
| French Equatorial Africa | 4 | | | | | |
| Gold Coast | 5 | | | | | |
| Libya | 50 | 17 | 4 | 2 | 4 | 5 |
| Madagascar | 21 | | | | | |
| Morocco (French) | 3 | | | | | |
| Morocco (International Zone) | 1 | | | | | |
| Morocco (Spanish Zone) | 3 | | | | | |
| Nigeria | 1 | | | | | |
| Sierra Leone | 21 | | | | | |
| Sudan (Anglo-Egyptian) | 4 | | | | | |
| Tunisia | 34 | 1 | | | | |
| Union of South Africa | 29 | P | | 1 | | |
| ASIA | | | | | | |
| Afghanistan | 524 | | | | | |
| Burma | 28 | | | | | |
| China | 18 | | | | | |
| India | 105 | 36 | 7 | 1 | | 1 |
| India (Portuguese) | 1 | | | | | |
| Indochina (French) | 5 | 5 | 10 | 3 | 5 | |
| Indonesia: | | | | | | |
| Java | 6 | | | | | |
| Sumatra | 1 | | | | | |
| Iran | 73 | 32 | 5 | | | |
| Iraq | 44 | 35 | 2 | 6 | 2 | 1 |
| Japan | 671 | 97 | | | | |
| Korea (Southern) | 21,042 | 461 | | | | |
| Lebanon | 1 | | | | | |
| Pakistan | 32 | 21 | 7 | 2 | 1 | |
| Palestine: Jerusalem | | | | | | 1 |
| Straits Settlements: Singapore | 13 | | | | | |
| Syria | 14 | 27 | 21 | 1 | 1 | — |
| Transjordan | 12 | | | | 1 | |
| Turkey (see Turkey in Europe) | | | | | | |
| EUROPE | | | | | | |
| France | 1 | | | | | |
| Germany (British Zone) | 12 | | | | | |
| Germany (French Zone) | 2 | | | | | |
| Germany (United States Zone) | 1 | | | | | |
| Great Britain: Island of Malta | 22 | | 21 | | | |
| Greece | 219 | | | | | |
| Hungary | 2 | 1 | | | | |
| Italy | 23 | | | | | |
| Sicily | 15 | | | | | |
| Poland | 37 | | | | | |
| Spain | 7 | 6 | | | | |
| Turkey | 91 | 20 | 3 | 2 | 1 | 5 |
| Yugoslavia | 76 | 62 | 21 | | | |
| NORTH AMERICA | | | | | | |
| Costa Rica ² | 5 | | | | | |
| Guatemala | 8 | | | | | |
| Jamaica ² | 3 | 4 | 2 | 2 | | |
| Mexico ¹ | 31 | 7 | 1 | 1 | 2 | 1 |
| Puerto Rico ² | 4 | | | | | |
| SOUTH AMERICA | | | | | | |
| Argentina | 21 | | | | | |
| Chile | 45 | 7 | 2 | 1 | 1 | 1 |
| Colombia | 80 | 21 | | | | |
| Curaçao | 1 | | | | | |
| Ecuador | 61 | 5 | | | | |
| Peru | 105 | | | | | |
| Venezuela | 23 | 2 | 2 | | 2 | |
| OCEANIA | | | | | | |
| Australia ² | 34 | 23 | 2 | 1 | | |
| Hawaii Territory ² | 1 | | 1 | | | |

*Reports from some areas are probably murine type, while others include both murine and louse-borne types.

¹ Includes murine type. ² Murine type. ³ Jan. 1-31, 1950. ⁴ In Inchon and Seoul only. ⁵ Off-shipping.

YELLOW FEVER

(C=cases; D=deaths)

| Place | January-March 1950 | April 1950 | May 1950—week ended— | | | |
|--------------------------|--------------------|------------|----------------------|----|----|----|
| | | | 6 | 13 | 20 | 27 |
| AFRICA | | | | | | |
| French Equatorial Africa | C 1 | | | | | |
| Port Gentil | C 1 | | | | | |
| Gold Coast | C 9 | 1 | | | | |
| Ankobra Ferry | D 1 | | | | | |
| Bisiasi | D (?) | | | | | |
| Kade | C 1 | | | | | |
| Oda Area: | | | | | | |
| Akwatia | C 1 | 3 6 | 1 1 | | | |
| Atiankama | C 1 | | | | | |
| Sierra Leone | C 1 | | | | | |
| Koinadugu District | C 1 | | | | | |
| NORTH AMERICA | | | | | | |
| Panama: | | | | | | |
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¹ Suspected. ² The fatal suspected case reported in Bisiasi Mar. 23, 1950, was not confirmed. ³ Includes 3 suspected cases reported week ended Mar. 25, 1950—not previously reported. ⁴ Reported in Azero Province during the period Jan. 1-Mar. 14, 1950, with 230 deaths. ⁵ Telegram dated May 6, 1950, 8 deaths

Regular Corps Examinations for Veterinarians

Examinations for veterinarians in the Regular Commissioned Corps of the U. S. Public Health Service will be held October 9, 10, and 11, 1950, in various cities throughout the country. Completed applications must be in the Washington Office by September 11, 1950.

Appointments are permanent and provide opportunities for career service in research in animal physiology, pathology, infectious and tropical diseases; in the veterinary aspects of public health, field investigation; and in food sanitation.

Appointments will be made in the grades of Assistant and Senior Assistant (equivalent to Army ranks of 1st Lieutenant and Captain, respectively). Entrance pay is \$4,486 for Assistant (with dependents) and \$5,346 for Senior Assistant (with dependents), including rental and subsistence allowance.

Applicants must have at least 7 years training and experience after high school, including graduation from an accredited school of veterinary medicine.

For application forms and additional information write to: Surgeon General, U. S. Public Health Service, Federal Security Agency, Washington 25, D. C., Attention: Division of Commissioned Officers.

* * *

The printing of this publication has been approved by the Director of the Bureau of the Budget (August 10, 1949).

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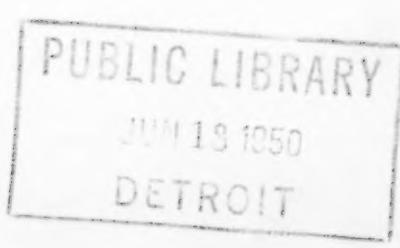
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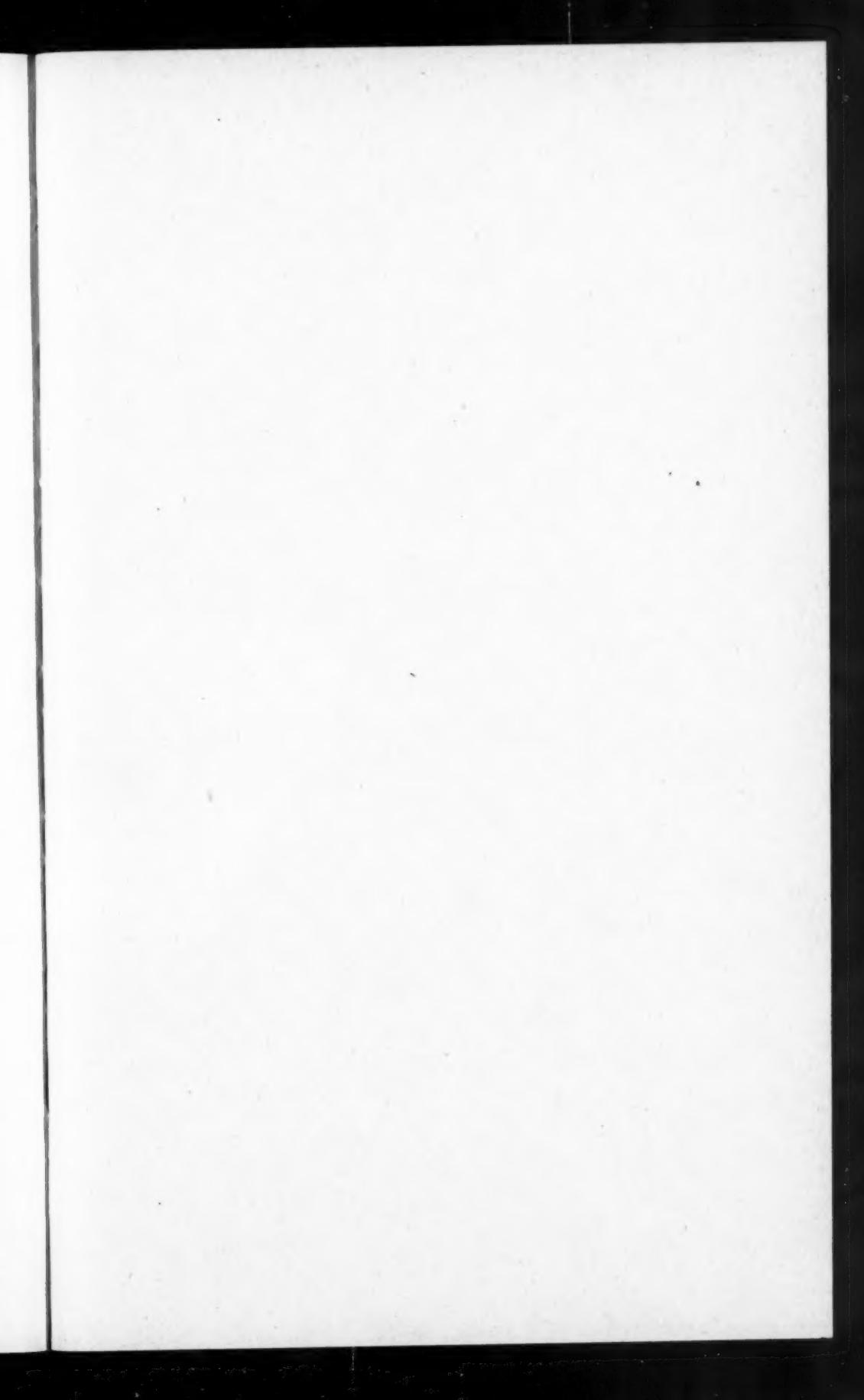
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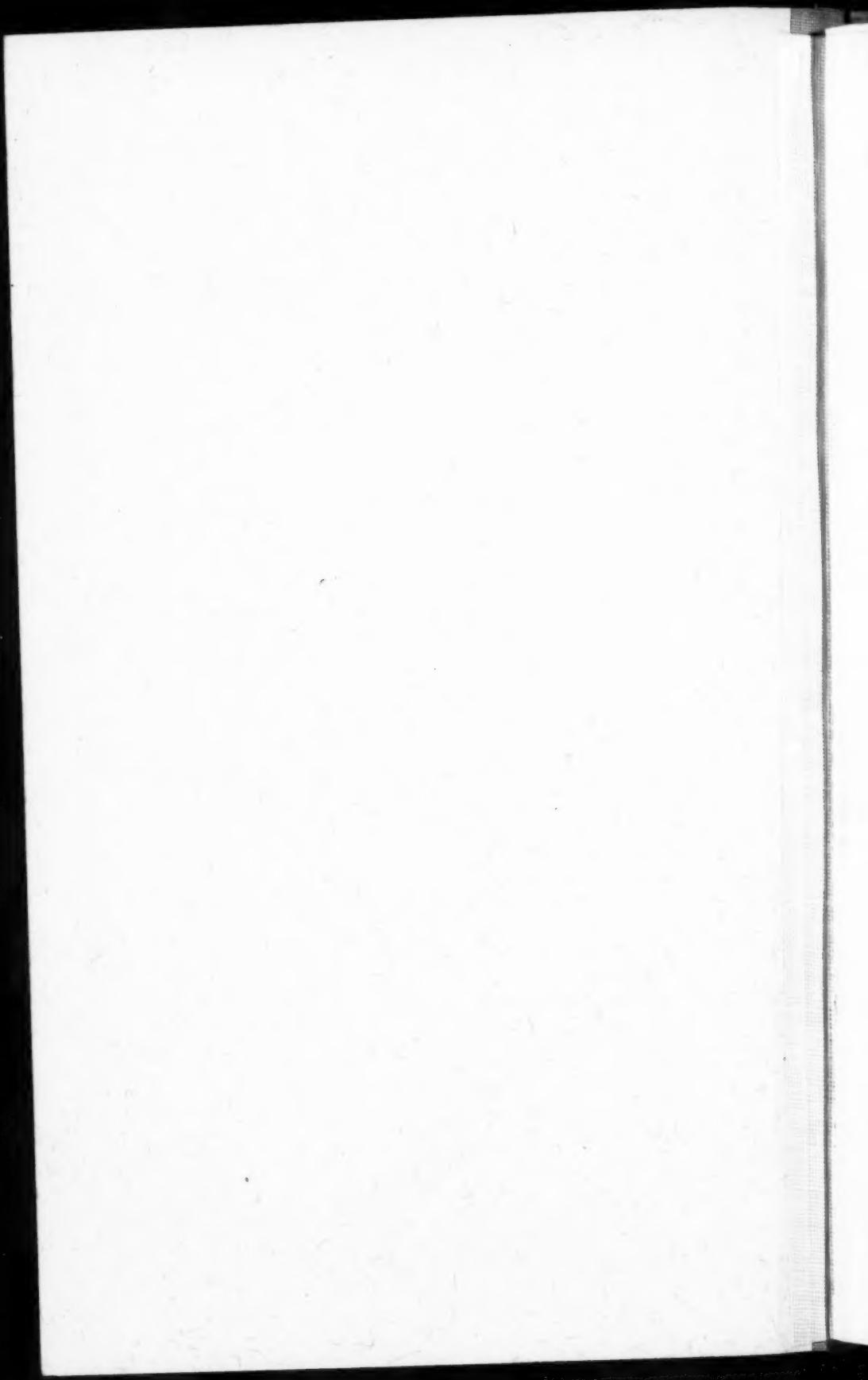
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**Index
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Nos. 1-26
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FEDERAL SECURITY AGENCY

PUBLIC HEALTH SERVICE

FEDERAL SECURITY AGENCY

Oscar R. Ewing, Administrator

PUBLIC HEALTH SERVICE

Leonard A. Scheele, Surgeon General

Division of Public Health Methods

G. St. J. Perrott, Chief of Division

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